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Hugh Cecil Earl of Lonsdale.

1761.

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Maſter of the *Temple*, and now Lord Biſhop of *London*.

A

TREATISE

ON THE

DISEASES and LAMENESS

OF

HORSES.

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AND

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The

THE Reader will be pleaſed to remember, that this Treatiſe is the reſult of many years conſideration, and that its doctrine is confirmed by experience and obſervation.

The author hopes too, that he hath pointed out ſome efficacious remedies for thoſe two dreadful evils, the bite of a mad dog, and the diſtemper amongſt the horned cattle, which have hitherto baffled all human ſkill.

And in order to extricate the ſcience of farriery from the hands of the ignorant and illiterate, the author, together with his brother, who were bred regular ſurgeons, — have undertaken the cure of horſes in their various complaints, and of having them ſhod in the moſt proper manner.

They

They therefore hope to meet with ſuch encouragement from the publick, as may induce them to carry on an undertaking, they are willing to think of ſome advantage to the community,—by which it is preſumed, this moſt noble animal, ſo much connected with the pleaſures, uſe, and neceſſities of mankind, will be treated at leaſt in a rational manner, and the ſcience of farriery be brought to ſome perfection.

A

TREATISE, &c.

CHAP. I.

On SHOEING.

Sub Judice Lis eſt.

I AM afraid the people who profeſs the art of ſhoeing will be much offended with this chapter, and hold it very cheap, becauſe it propoſes to inſtruct them in this art.

If you pretend to have your horſe ſhod according to your own mind, it is a general ſaying amongſt theſe men, that they do not want to be taught; which is as much as to ſay, in other words, there is nothing known in their art, or ever will be, but what they already are acquainted with—And what is particular, there is not one of theſe artiſts, how much ſoever they differ in method, but gives the ſame anſwer, and has vanity enough to think, that he knows more than his neighbour—Vanity! the nobleſt paſſion of the mind, the beſt, the kindeſt gift of heaven, given us to balance each human failing.

It has been a maxim amongſt wiſe men of all ages, and has been ſaid by twenty authors, or more, that nature does nothing in vain; from the ob-

ſervation

ſervation of which truth, reaſonable people have been apt to conclude, that nature ſhould be the guide of all our operations.

Now, if you aſk one of theſe artiſts his reaſon for acting in this or that particular manner, or ſhould enquire of him the uſe of any part, aſſigned to ſome particular end, he can give no anſwer, nor even pretends to have any knowledge thereof, but is guided by cuſtom alone.

Hence reaſonable people will alſo conclude, that many errors have aroſe in the execution of this art, and that theſe artiſts ſhould not think themſelves aggrieved, by any information they may receive from any hand.

Be that as it will, my intent is to explain the proper manner, original

 deſign,

deſign, uſe, and abuſe of ſhoeing, as clearly and conciſely as I can, ſo that every man of common capacity may be able to judge for himſelf in this matter.

When time was young, when the earth was in a ſtate of nature, and turnpike roads as yet were not, the horſe needed not the aſſiſtance of this artiſt; for the Divine Artiſt had taken care to give his feet ſuch defence as it pleaſed him; and who is weak enough to ſuppoſe, His wiſdom was not ſufficient to the purpoſe in ſuch a ſtate.

But to prevent all ſuppoſition and cavilling on this matter, let us only appeal to our ſenſes, and we may every day ſee horſes, mares, and colts, running about on all ſorts of ground unſhod, and uninjured in their feet.

In many parts of the world to this day, even on the moſt rocky ground, horſes are accuſtomed to carry their riders unſhod ; and in this kingdom I have known ſeveral horſes rode for a conſiderable time unſhod, on the turnpike roads about London, without any injury done to their feet.

And, I believe, there are many horſes, that might travel their whole life-time unſhod, on any road, if they were raſped round and ſhort at the toe ; becauſe all feet, expoſed to hard objects, become thereby more obdurate, if the ſole be never pared. And ſome by their particular form, depth, and ſtrength, are enabled to reſiſt them quite, and to ſupport the weight without breaking.

But

But becauſe there always was a great difference in the texture of horſes feet, mankind (after certain periods of time, when the face of the earth became changed) added another defence, beſides the natural one, to preſerve the cruſt of ſuch feet as were weak, and not ſo well able to ſupport them againſt new and hard objects.

From the good of this practice, tried and diſcovered on particular kinds of feet (though perhaps but a partial good) it is no wonder, that the cuſtom of putting ſhoes on all kinds of feet became general.

Our anceſtors, the original ſhoers, propoſed nothing more, I dare ſay, in their firſt efforts, than to preſerve the cruſt from breaking away, and thought themſelves

themſelves happy they had ſkill enough ſo to do—the moderns alſo are wiſely content with this in the racing way.

But, in proceſs of time, the fertility of invention, and the vanity of mankind, have produced variety of methods, almoſt all which are productive of lameneſs; and I am thoroughly convinced, from obſervation and experience, that nineteen lame horſes of every twenty in this kingdom, are lame of the artiſt, which is owing to the form of the ſhoe, his ignorance of the deſign of nature, and male-treatment of the foot, every part of which is made for ſome uſe or purpoſe—tho' he does not happen to know it.

But waving all theſe modern artiſts know, or do not know, I ſuppoſe it will be univerſally aſſented to, that whatever method of ſhoeing approaches neareſt

to

to the law of nature, ſuch is likely to be the moſt perfect method; and as the feet of different horſes differ from each other, ſo, if we would arrive at any perfection in this art, the human reaſon muſt be employed, in diſcovering and aſcertaining wherein their difference conſiſts, that each may be treated according to its nature—And yet with reſpect to each, and all, ſome general rules may be ſtill allowed.

For the ſake of thoſe, who may be unacquainted with horſes feet, and for their inſtruction, I ſhall deſcribe ſuch parts only of the foot, for the preſent, as offer themſelves to our view, and come under our cognizance, as the immediate and principal objects of care, when intended to be ſhod.

Theſe are the outer ſole, the cruſt which like a wall ſurrounds it, the frog,

frog, and bars one on each ſide, and the ſpongy, ſkin-like ſubſtance which covers the hinder and cellular part of the foot, and is continued to the heel of the horſe.

With reſpect to the treatment of ſome of theſe, the Sieur la Foſſe (to whom the World is indebted for many ingenious obſervations) has already laid down ſome Rules—And though I dare ſay every man, who has tried his method of ſhoeing, is convinced of its impropriety, I mean as a general method, yet ſome uſeful hints may be gathered from his doctrine, and the good and evil of his ſhoe ſhall be ſpoken of hereafter.

He ſays, the ſole ſhould never be pared; his reaſon is very obvious and juſt; namely, that the ſole, not pared,

acquires a great degree of firmneſs and Obduracy, whereby it is better enabled to reſiſt all extraneous bodies, ſuch as Glaſs, Nails, Flint, &c.

There is another reaſon equally obvious, which is, that the wiſdom of the Creator intended this outer ſole, and its obduracy, as a natural and proper defence to the inner ſole, which lies immediately under the other, between that and the bone of the foot —This inner ſole being nothing elſe but the expanſion of one of the flexor tendons of the leg, which is continued to the bottom of the foot, and overſpreads the bone thereof.

This tendinous expanſion, when the outer ſole is pared, and the animal put into violent motion, is, for want of its defence, ſuſceptible of great pain, conſequently liable to great Inflammation ;

flammation; and from this cauſe many a horſe has been rendered lame for ever.

If it be aſked, what becomes of the ſole when not pared? it dries, ſeparates, and ſcales away.

La Foſſe has alſo ſaid, the frog ſhould never be pared; his reaſon is, that the frog, being united to that tendon of the leg which is continued down to the bottom of the ~~ſole~~ foot, (all which tendons are unelaſtick bodies) is itſelf an elaſtick body, is placed there as a proper point of ſupport, and ſerves as a baſis, to relieve this tendon at each ſtep or motion.—But if the frog be pared, it cannot be admitted to touch the ground; for want of which ſupport, the tendon is elongated and ſtrained, hence frequent lameneſs of this tendon is occaſioned;

and from this cauſe alſo Windgalls are moſt frequently produced.

I know there are many people who maintain tendons to be claſtick bodies, but it is a ridiculous and vulgar error; for all tendons or muſcles are confined to their proper ſphere of acting; and from hence it will follow, that if they were claſtick, the force of any muſcle (part of which is tendinous) would be eluded, before ſuch tendinous part could act on its proper object.

Moreover every man's eye will ſhew him, that tendons are not claſtick, from their looſe uncontracted figure, which is eaſily to be perceived in the hinder leg of the horſe, when he moves gently.

There

There are other reaſons why the frog ſhould not be pared.

If admitted to touch the ground, it helps to ſtop the horſe from ſliding, as the figure of it will plainly evince.

The frog, together with the bars, occupying the hinder part of the foot, is deſigned by nature to diſtend and keep it open, which, when cut away, ſuffer the heels, the quarters, and the coronary ring to become contracted, whereby another lameneſs is produced, which ſhall be treated of in its proper place.

'The bar is that part ſituate between the heel, the frog and the quarter on each ſide, and is not to be ſcooped out according to the general cuſtom, for the reaſon laſt mentioned, becauſe,

together

together with the frog, its uſe is to keep open the hinder part of the foot, as well as to defend it.

The ſpongy, ſkin-like ſubſtance is not to be cut away till it becomes raggy, becauſe it is the expanſion of the ſkin round the heel, its uſe being to unite more firmly the foot and its contents, and to keep the cellular part of the heel from growing rigid; it alſo ſurrounds the coronary ring, and may be obſerved to peel, and dry away as it deſcends on the hoof.

Theſe are general rules to be obſerved, with reſpect to every kind of foot.

But becauſe la Foſſe has ſaid, the ſole and frog ſhould never be pared, many of our countrymen, miſtaking his meaning, have fallen into another extreme,

extreme, and ſo have not pared the foot at all.—Yet it is neceſſary, that the cruſt of all horſes which are ſhod, ſhould be pared more or leſs, according to its different degree of ſtrength. —But no general method can be laid down in this reſpect, becauſe the nature of feet differ greatly from each other, by which alone the artiſt is to be guided.

And to prove this neceſſity of paring the cruſt, it is to be obſerved, that the ſuperficies of the cruſt of every foot, whereon the ſhoe reſts, becomes rotten in a few weeks; ſo that if a new ſhoe be ſet upon an unſound foundation, it will not ſtand firm or long — The cruſt alſo, in ſuch caſe, will ſhell or break away.

Now where the foot is deep and hollow, the cruſt is generally thick

and

and ſtrong, this cannot be pared down too low (ſo as not to fall into the quick) becauſe the ſtrength of the cruſt alone will occaſion ſuch a compreſſion on the interior parts of the foot, as to produce a lameneſs, which will be ſhewn in its proper place.

In all broad fleſhy feet, the cruſt is thin, and ſhould therefore ſuffer the leaſt poſſible loſs.—On ſuch feet the raſp alone is generally ſufficient to make the bottom plain, and produce a ſound foundation, without the uſe of the deſperate Buttreſs.

And thus each kind of foot is to be treated, according to its different degree of ſtrength or weakneſs.

The ſuperficies of the foot round the outſide, now made plain and ſmooth, the ſhoe is to be made quite flat,

flat, of an equal thickneſs all round the outſide, and open and moſt narrow backwards at the extremities of the heels for the generality of horſes,—thoſe whoſe frogs are diſeaſed, either from natural or incidental cauſes, requiring the ſhoe to be wider backwards;—and to prevent this flat ſhoe from preſſing on the ſole of the horſe, the outer part thereof is to be made thickeſt, and the inſide gradually thinner.

In ſuch a ſhoe, the frog is admitted to touch the ground, the neceſſity of which has been already ſhewn;—add to this, the horſe ſtands more firmly on the ground, having the ſame points of ſupport, as in a natural ſtate.

Here now is a plain, eaſy method, agreeable to common ſenſe and reaſon, conformable to the anatomical

ſtructure of the parts, and therefore to the deſign of nature.—A method ſo plain, that one would think nobody could ever ſwerve from it, or commit any miſtake in an art, where nothing is required, but to make ſmooth the ſurface of the foot, to know what loſs of cruſt each kind of foot will bear with advantage to itſelf, and to nail thereon a piece of iron, adapted to the natural tread of the horſe; the deſign, good, or uſe of the iron, being only to defend the cruſt from breaking, the ſole wanting no defence, if never pared.

If we now examine the preſent method of ſhoeing, by comparing it with what has been already ſaid, we ſhall eaſily perceive its ſad effects, which ſhall be the ſubject of the enſuing chapter.

CHAP.

CHAP. II.

Is relative to the Firſt.

NOW the modern artiſt uſes little difference in the treatment of any kind of foot; but with a ſtrong arm, and a ſharp weapon carries all before him, and will take more from a weak-footed horſe at one paring, than nature can furniſh again in ſome months, whereby ſuch are rendered lame.

If a ſtrong-footed horſe, with narrow and contracted heels, be brought before him, ſuch meets with treatment yet more ſevere; the bar is ſcooped out, the frog trimmed, and the ſole drawn as thin as poſſible, even to the quick, under pretence of giving him eaſe; becauſe, he ſays, he is hot-footed

or foundered.—By which treatment, the horſe is rendered more lame than he was before, as I ſhall immediately ſhew.

In the interior part of the foot, (which few or none of theſe artiſts have ever examined, at leaſt to little purpoſe) there is a broad cartilage annexed to each ſuperior end, or corner of the foot-bone; there is alſo a ſmall bone, called the nut-bone, placed tranſverſely in the foot, between the bone thereof and the coronary bone; the ends of which are articulated to the inner ſides of the foot-bone, which ends are alſo cartilaginous; and from the ſituation and concern of theſe in all motion, it is neceſſary they ſhould be of a cartilaginous, and pliant, or yielding nature.

Now

Now when this ſame foundered foot (as it is called) is robbed of thoſe parts, which were deſigned to keep it open, the heels and the coronary ring become more contracted than they were before; by which means theſe cartilages of the foot-bone are more compreſſed. All the membranes and tendinous expanſions of the foot are compreſſed and inflamed, and the cartilaginous ends of the nut-bone, together with the ligaments, are ſqueezed as in a vice.

And it is to be obſerved, that whenever the heels of the horſe are deep or narrow, and there is a ſtricture round the coronary ring, ſuch feet are generally more or leſs lame, after ſome uſe, and that merely from the compreſſion above named.—The truth of which will be more readily conceived by

by examining the interior ſtructure of the foot.

But the modern artiſts, not content with ruining and deſtroying the work of Providence, ſeem reſolved, that all their operations ſhall be of a-piece, and in every thing act by contraries.—And, to prove this, I ſhall demonſtrate, that the ſhoe commonly made uſe of, is contrary to ſenſe and reaſon, as well as to the natural tread of the foot.

It is to be underſtood, that no horſe can go, if the ſhoe reſts upon the ſole; and to avoid this evil, the modern ſhoe muſt be formed, and ſtand concave; becauſe the modern ſhoe is made thinneſt on the outſide, and thickeſt on the inſide.

Mark

Mark now the inconveniences arifing from the unequal furface of fuch a fhoe.

The horfe, having fewer points of fupport, is more liable to blunder, to ftrain the tendons, injure the cartilages and ligaments, break the bones of the foot, and to diflocate fome of the joints of the fore part.

The weight of the horfe bears chiefly on the inner fide of this fhoe, which is the higheft part; fo that the nails at the heel (when the horfe comes to act) muft break, or give way, or tear the cruft; hereby the fhoe gets fomewhat loofe, the finer fand infinuates itfelf between the foot and the fhoe-heel, and the horfe is according to our phrafe gravelled; perhaps, gets a corn, with which he is lame for life;

no

no cure being ſuppoſed to be had for this evil.

In this kind of ſhoe, tho' the frog be not pared, it will be removed to ſuch a diſtance from the ground, that it cannot be admitted to touch it; by which intervention of the ſhoe the flexor tendon of the foot loſes its ſupport, as much as if the frog was actually pared.

Further, the heel of the horſe is corroded and eat away, and the cruſt more liable to be broke; nevertheleſs, theſe men are obſtinate and weak enough to affirm the contrary, and give it as a reaſon for making the outſide of the ſhoe thinneſt, not perceiving the conſequence of ſuch unequal preſſure on the cruſt.

Having

Having now proved, that variety of lameneſs is produced by a wrong method of ſhoeing, I ſhall leave what has been ſaid to the conſideration of the reader; the truth of which, obſervation and experience will make manifeſt.

CHAP. III.

Contains ſome further Obſervations on Shoeing.

LET the ſhoe on every horſe ſtand wider at the points of the heels than the foot itſelf; otherwiſe, as the foot grows in length, the heel of the ſhoe in a ſhort time gets within the heel of the horſe; which preſſure often breaks the cruſt, produces a temporary lameneſs, perhaps a corn.

Let every kind of foot be kept as ſhort at the toe as poſſible, (ſo as not to affect the quick) for by a long toe, the foot becomes thin and weak, the heels low, and the flexor tendons of the leg are ſtrained ; the ſhortneſs of the toe helps alſo to widen narrow heels.

In all thin weak-footed horſes, the raſp ſhould be laid on the toe in ſuch a manner, as to render it as thick as may be ; by which means the whole foot becomes gradually thicker, higher, and ſtronger.

In all feet, whoſe texture is very ſtrong, the raſp may be laid obliquely on the fore part of the foot towards the toe, and the toe itſelf thinned, whereby the compreſſion on the parts is rendered ſomewhat leſs, by di-

miniſhing

miniſhing the ſtrength of the hoof or cruſt.

But this raſp is to be uſed with diſcretion, leaſt the cruſt being too thin, and not able to ſupport the weight of the horſe, a ſand-crack enſue; which frequently happens, from too free, or unſkilful uſe of this tool, and from the natural rigid texture of the coronet.

The heel of the ſhoe, on all ſtrong and narrow-heeled horſes, ſhould be made ſtrait at the extreme points; the form of the ſhoe in ſome meaſure helping to diſtend the heel of the horſe. For the ſame reaſon, the ſhoe on no horſe ſhould be continued farther than the point of the heel.

It has been ſaid already, that neither frog or ſole ſhould ever be pared;

nevertheleſs, it muſt be underſtood, that it is impoſſible to pare the cruſt, without taking away ſome of the adjacent ſole, and it is alſo requiſite, in order to obtain a ſmooth and even ſurface, ſo far as the breadth of the ſhoe reaches, and no farther.

The frog alſo will become ragged, and looſe pieces will occaſionally ſeparate from the body thereof, perhaps in one foot, and not in the other. When this happens, it ſhould be cut away with a knife, to prevent the gravel lodging therein. But if it be left to the artiſt to do, he will be ſure to take away more of it at one time, than will grow again in many weeks. —The inferior point of the ſame, towards the toe, ſhould alſo be taken down, in ſome kinds of feet, where it grows high.

La

La Foſſe has given us a caution againſt the uſe of cramps, or what in England we call corking; that is, turning up the ſhoe at the points of the heels.

He ſays, that the frog being hereby removed to a great diſtance from the ground, the tendon will be ineviably ruptured;—but this is true only in part.—In the ſummer-time, when the ground is dry and hard, I think this effect would frequently happen, eſpecially if the horſe was rode hard.—But in the winter-time, when the ground is wet, this cannot happen in a flat ſhoe; becauſe the corking of the ſhoe-heels is then buried in the ground, ſo that the frog is ſtill admitted to touch the ground, and to reſt thereon.—And it is neceſſary that all ſportſmen, who hunt on hilly or

ſlippery

ſlippery countries, ſhould have the ſhoe-heels turned up in the winter-time, eſpecially the hinder ones, for the ſecurity of their perſons, and the fore ſhoes alſo, if they like it, without danger of laming the tendons, for the reaſon above given.

'This method of treating the foot, and ſuch a kind of ſhoe as has been deſcribed, I have uſed many years; and, to the beſt of my remembrance, have not had a horſe lame ſince, except when pricked by the artiſt;—and it is a matter of the greateſt aſtoniſhment to me, how any other form of a ſhoe could ever come into general uſe. Yet no particular method of ſhoeing whatſoever can take place; and this will happen from the different nature, form, and texture of horſes feet: but the prejudices of mankind, on all theſe occaſions, may be worth remarking

remarking.—One man invents a new piece of machinery, which he finds to be very uſeful in many reſpects.—His pride and partiality would fain have it extend to all purpoſes. In this light he recommends it to his neighbour, who tries it, and having found it not anſwer his particular purpoſe, he falls into the other extreme, and declares it to be good for nothing.—Hence that which may contain many virtues, when uſed with judgment, becomes neglected, and is, perhaps, totally thrown aſide; and hence the perfection of ſome arts is leſs extenſive.

Now this flat ſhoe is not to be made with a ſmooth ſurface, after the French manner, but channelled round, or what is called fullered, after the Engliſh manner; by which the horſe is better prevented from ſliding about, and the heads of the nails are leſs liable

able to be broke off; both which inconveniences attend the ſhoe whoſe ſurface is ſmooth.

But ſo ignorant are theſe our artiſts, (who do not want to be taught, or, in other words, know every thing) that not one in twenty of them can make theſe flat ſhoes, tho' a pattern lies before them, for which reaſon they generally diſlike and condemn them.

It has hitherto been thought a difficult matter to prevent horſes from cutting; nevertheleſs, it is generally very eaſy.

Whoever will be at the trouble of examining the feet of ſuch horſes as are accuſtomed to cut themſelves, will at all times, and in all horſes, find the cauſe to be the ſame; namely, to turning out their toes.

From

From hence alſo the neceſſity of boots, and bolſters, and bandages, round the fetlocks of half the horſes that are trained at Newmarket, to prevent knocking their joints together.

Now the colt ſtanding to graze with an out-ſtretched foot, which is no uncommon poſture, reſts chiefly on the inſide of it, by which means that part is worn loweſt; this is diſregarded; and, by a habit of ſtanding, the toe grows outward, and he becomes crooked from the fetlock joint downwards.

It may perhaps be ſaid, that this habit of turning out the toe is entailed by nature; but whether it be natural, or acquired; the true cauſe of it is ſtill the ſame in all horſes, and depends on nothing elſe, but the inſide heel being lower than the outſide.

And to prove this doctrine, as ſoon as you perceive the colt's toe turning out, pare down the outſide of the foot as much as you can ; repeat it as often as the foot will allow, and let the inſide alone ; ſo will he grow ſtrait on his legs and feet, and never cut or knock himſelf about when he comes into uſe.

'This method will alſo prevent grown horſes from cutting, if the cruſt of the foot be ſtrong enough to bear a ſufficient loſs ; if not, the ſubſtance of the iron may be made thicker for the inſide of the foot, from the heel to the toe, than it is for the outſide ; and where it is practicable, and ſhall appear neceſſary, both theſe methods may be uſed, and both will aſſiſt for the purpoſe.—I have rode a horſe treated in this manner ſeveral years, and have found

found but little inconvenience to his going, or to his feet, much depending in this caſe on the goodneſs thereof.

Such of the Dealers, who are maſters of their buſineſs, uſe this kind of ſhoe to raiſe the inſide of the horſe's foot, and make him point, as they call it, or ſtand ſtrait on his feet; and the chapman, who thinks he has bought a ſtrait legged nag, is much ſurprized at the alteration he perceives in him, the firſt time he is ſhod in other ſhoes.

The cruſt ſhould alſo be ſuffered to grow fulleſt on the inſide of the foot, and the outer part thereof be raſped away as far as can be ſpared.

Nevertheleſs, the modern ſhoers, acting in all things by contraries, raſp

away as much as they can from the inner part of the feet.

CHAP. IV.

Wherein it will be proved, that Shoeing is but a partial Good.

IT has been ſaid already, that all horſes, whoſe feet are contracted round the hinder part, or whoſe cruſt is deep and ſtrong, are generally more or leſs lame, when they have been ſhod and uſed any time, and that from a compreſſion on the contents of the foot.

And no method of ſhoeing whatſoever will prevent the lameneſs of ſome ſuch feet; and yet no man ever ſaw a horſe (with this, or any other kind of foot)

foot) lame, but by ſome injury, or from too great a length of toe whilſt he remained unbroke, and running about in a ſtate of nature.

Now if ever La Foſſe's ſhoe be uſeful, it is chiefly in this caſe; for in ſuch a ſhoe the heel of the horſe reſts in ſome meaſure upon the ground, receives ſome ſhare of weight, and is, by means of ſuch weight and preſſure, kept open and expanded,—by which expanſion of the heels, the compreſſion on the interior parts of narrow-footed horſes is removed, and he that was before lame is, by degrees, as the foot ſpreads, rendered ſound,—if there be no diſeaſe in the interior parts of the foot.

Again, where horſes have feet inclined to the other extreme, whoſe heels are weak and low, if the ſhoe be

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ſet ſomewhat ſhort at the points of the heel, ſuch will, by degrees, improve, and grow higher.—Yet an Engliſh farrier can never be prevailed on to believe, that weak low heels will become ſtronger by leaving them expoſed to hard objects.—But it muſt be expected that horſes, with weak or diſeaſed feet, who have been accuſtomed to go in long broad ſhoes, will at firſt go very lamely in ſhoes which are either ſhort or narrow. And many that are lame of the ſhoer with various diſorders in their feet, would be cured by La Foſſe's ſhoes, if the frog, ſole, and bars were not pared out.—But when thoſe things which are deſigned by the Divine artiſt as a natural defence to the interior part, are cut away by the *Superior Wiſdom* of our earthly artiſts, why then undoubtedly La Foſſe's ſhoes won't do, for the horſe requires ſome artificial defence, to ſupply the loſs

loſs of the natural one.—Now it is the weight, unequal preſſure, form and action of the iron, made uſe of to protect the foot when it is thus horribly abridged by our artiſts, that is productive of almoſt all the evils incident to horſes feet.

So then for training, La Foſſe's ſhoe will be proper for horſes, whoſe feet are of too ſtrong a texture, and for thoſe which are too weak, or affected with various diſorders; but for horſes that have good feet, I would chuſe to have the iron continued to the point of the horſe's heel, but no farther; and for all horſes that are uſed on training ground, the iron ſhould be very narrow, little wider than a plate, without a waſh, of a thickneſs ſufficient to keep it from bending, according to the ſize and weight of

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the horſe.—But my knowledge of the good and bad effects of the ſhort ſhoe for horſes uſed upon the road, even for ſuch as are benefited by it on the turf, does not extend ſo far as to ſettle this matter—aobut which there are many diſputes and contradictory accounts even amongſt unprejudiced men.—All which accounts are, I dare ſay, very true, and amount only to this, that ſome horſes can go upon the road in theſe, or without any ſhoes at all, and ſome cannot.

Theſe are the advantages attending the ſhort ſhoe; but if Mr. La Foſſe was to ride a fox-hunting down the ſides of our ſteep and ſlippery hills, I dare ſay he would not uſe them twice; for horſes ſo ſhod, have, in this kind of work, great difficulty to ſtand at all; beſides, from ſuch ſlipping and ſliding about, they are certainly more liable

to

to be lamed; and from the inequality or ſloping of the ground, that hunters go over in moſt countries, the tendinous fibres of the leg are, more or leſs, occaſionally ſtrained and elongated.—And this I can truly aver, having myſelf made the experiment, and lamed a horſe in the tendons of both legs, the very firſt day of hunting him in theſe ſhort ſhoes.

There are many men, who can diſtinguiſh theſe aſs-footed horſes, and pronounce with certainty the lameneſs thereof, even without ſeeing them move at all; as readily as other men ſhall diſtinguiſh gold from ſilver, or lead from iron.

But becauſe all men have not been attentive enough to make the ſame diſcoveries, ſome thro' ignorance, or prejudice to their own opinions, have

aſſerted and maintained other kinds of lameneſs, which do not exiſt at all; and talk of horſes being cheſt-foundered, and ſhook in the ſhoulders, when the diſorder is in the feet alone.

Wherefore know all men by theſe preſents, that whoſoever talks of horſes being cheſt-foundered, or ſhook in the ſhoulders, is an ignorant pretender to the knowledge of this animal, and is himſelf ſhaken in the head.

Now, to prove the truth of this doctrine, and that ſhoeing is but a partial good, take this ſame narrow-heeled, or ſtrong-footed horſe (which, becauſe it is fair to the eye, is perhaps called a very good one) pare down the cruſt as much as you can, cut the toe off round and ſhort, and turn him out to graſs bare-footed, he will become ſound in courſe of time, if the interior

interior parts of the foot are not diſeaſed.

The true cauſe of which is, that the foot not being confined in a ſhoe, the weight of the horſe expands the ſame; the cruſt, and the ſtricture of the coronary ring, is relaxed by the dews and moiſture, and the compreſſion on the parts is removed.

And herein alone it is, that the unſkilful are impoſed on by the farrier, who (having done ſomething to your horſe, for what he calls a lameneſs in the ſhoulder, and ordered him to be turned to graſs) vainly believes ſuch ſoundneſs to be the effect of his remedy; and you, for want of better knowledge of the animal, are perſuaded to believe the ſame.

'Take the ſame horſes, whoſe feet by their open figure and relaxed ſtate are become ſound, confine them again in a ſhoe, keep them at houſe, in ſpite of all art ſome of them will become lame again, perhaps the firſt time of riding; eſpecially if the weather be hot and dry, merely from the compreſſion above-named.

Who now does not ſee the horrid barbarities of rowelling, bliſtering, nay, even boring the ſhoulders with a red-hot iron (under pretence of curing a lameneſs therein) committed on this moſt noble animal, by the obſtinacy, pride, or folly of mankind.

Yet I would not be underſtood to mean, that there is no ſuch thing as a lameneſs in the ſhoulder; becauſe the muſcles and ligaments thereof are liable

liable to be ſtrained, as well as other muſcular and ligamentous parts.

But that no man may ever after be miſtaken herein, I will lay down one unerring rule, whereby he may diſtinguiſh the reality of this diſorder, without conſulting the farrier at all; which is, that the horſe, in this circumſtance, always drags his toe upon the ground; for it is impoſſible that the horſe can extend his foot to go on, without extending alſo the muſcles of the ſhoulder, which act of extenſion he, to avoid pain, or from inability, does not chuſe to have performed.

It appears alſo, from the nature of the articulation of the humeral-bone, with the ſcapula, or blade-bone, that ſuch is capable of diſlocation, either forward or backward; and there are many farriers in this kingdom, who pretend

pretend to have cured this diſlocation, by the means of a patten-ſhoe put on the foot of the lame leg ; the truth of which they would atteſt on oath, perhaps, ſeal with their blood.

But a patten-ſhoe, in this caſe, muſt of neceſſity do harm inſtead of good ; becauſe it will force the head of the humeral-bone further from its articulation with the ſcapula.

Since the firſt publication of this treatiſe, I have ſeen an inſtance of a diſlocation of this bone in a horſe, which was eaſily reduced by being immediately taken in hand, which puts this matter out of diſpute ; I ſay diſpute, becauſe ſome of our learned writers on the ſubject of horſes, have boldly ſaid, ſuch a diſlocation cannot happen.—Which doctrine of theirs will ſerve to ſhew, how little ſuch men

men are acquainted with that part of the anatomy of a horſe, which relates to the n ature of articulation.—And when this humeral-bone is reduced, it is very proper for the horſe to wear a patten-ſhoe for ſome time afterwards, till the ligaments belonging to this joint have recovered their former ſtrength.—Towards which the frequent uſe of vinegar will contribute as much as any application.

Now the proper method of reducing all diſlocations is by making extenſion both ways.

By diſeaſes ariſing from the contracted form of the feet, from conſequent pain, and manner of ſtanding in the horſe, to eaſe theſe feet, the muſcles of the ſhoulders occaſionally waſte away; and this is what is meant by the word cheſt-foundered, or ſhook in

in the ſhoulders, which miſtake ariſes from not underſtanding the nature of feet.

And from the pain occaſioned by a ſpavin, or other diſorders in the joint of the hock, the muſcles of the quarter will frequently waſte away alſo; but it will be equally abſurd in either of theſe caſes to ſay, that the lameneſs of the horſe is in the ſhoulder, or in the quarter; in both theſe caſes the cauſe is the ſame; namely, pain, and habit of ſtanding.—And yet from violence received on the ſhoulder, the muſcular parts may waſte away, in like manner as in the human ſpecies.

But to ſet this matter in the cleareſt light it is to be obſerved, that where both ſhoulders are waſted, you will readily perceive the cauſe of it in both feet; but if both feet are not concerned,

or

or one ſhoulder only be waſted ; it is owing to ſome impreſſion or violence upon the nerve, or artery, for which, I believe, there is no remedy in either caſe ; but theſe diſtinctions are ſo far of uſe, that they may be the means to prevent our puniſhing the animal to no purpoſe, which too often happens, from our not being acquainted with the real cauſes of diſeaſe.

To prove ſtill further, that ſhoeing is but a partial good.—When any other kind of foot is become ſhelly and broken, the cruſt thin, or the heels low, turn the horſe out to graſs without ſhoes, raſp the foot ſhort at the toe, keep it conſtantly raſped as it grows, ſuch foot will in a ſhort time flouriſh again, and become juſt as it was in a natural ſtate, when he was a colt.

And here let it be remembered, that it is much to the advantage of all colts to keep their toes ſhort; mares alſo in foal will by this means carry their load much eaſier.—Diſcretion being had thereunto, as in paring the human nail, which, if cut too cloſe, will cauſe a temporary forenefs.

Nevertheleſs no harm, except an immediate foreneſs, which will ſoon go off, attends cutting the toe of the horſe even to the quick, as ſhall be immediately ſhewn.

If you have a horſe, whoſe foot is fleſhy, whoſe ſole is higher than the cruſt, take him and cut him round at the toe, till the blood follows, and ſtands in drops; turn him to graſs bare-footed, he will in a ſhort time

make

make a new ſhoot at the coronet, the weak cruſt will become by degrees more ſolid, and the thin ſole more obdurate, the heels will get high and ſtrong, and behold, where you could not before well find a place to drive a nail, the whole foot is now rendered tough and firm, will bear hammering like a piece of board, will carry as flat a ſhoe as any other kind of foot, and will continue ſo to do, if it be never pared or ſtopped.—Provided always, the interior parts of the foot have not been injured by diſeaſe or accident.

Hence it is manifeſt enough, that all horſes, when turned to graſs for a time, ſhould have their ſhoes taken off, and their toes kept raſped round and ſhort.

The feet of ſtallions are alſo beſt without ſhoes, whether they are kept at houſe or abroad; the cruſt at the bottom of the foot being occaſionaliy pared down, according to the depth, ſtrength, and growth thereof.

Let any man keep one foot of a ſtallion ſo managed, and the other in a ſhoe, he will ſoon find a wide difference between the two feet.

Hence it will follow, that all breeders of horſes, ſhould be well verſed in the difference of feet, the laws of nature ſeldom varying in this or other reſpects.

And here occurs to me the wrong judgment of the grooms in the indiſcriminate cuſtom of ſtopping and greaſing all ſorts of feet; for greaſing and

and ſtopping ſuch feet, whoſe cruſt is weak, and whoſe ſole is ſpongy, will render them more weak and more ſpongy ; ſuch feet cannot be kept too dry.

Nevertheleſs, it is neceſſary to anoint the coronary ring of ſuch with ſome cooling oil, ointment, or mucilaginous compoſition, to keep it pliant, and free from contraction and rigidity. —Urine will alſo render the cruſt of weak feet tough, and help to conſolidate the ſole.

On the other hand, the hoof being capable of contraction and expanſion; ſtrong feet cannot be kept too full of oil, for the reaſons before given.

CHAP.

CHAP. V.

Treats of various other Lameneſs.

LA FOSSE has given us various accounts of fractured bones in the foot; for my own part, I have never ſeen any ſuch thing, but can eaſily give credit to the poſſibility thereof.

Yet I have ſeen many inſtances of ſudden lameneſs brought on horſes in hunting and in racing, by a falſe ſtep, which have continued lame their whole life-time; and upon examination, I have found the ligaments of the nut-bone rendered uſeleſs, for want of timely aſſiſtance and knowledge of the cauſe; from hence the cartilages of the ſame have been ſometimes oſſified—and the bones of the foot have

been ſometimes waſted, and ſometimes enlarged, it being no uncommon thing to meet a horſe, whoſe feet are not fellows, the natural form of the injured foot being generally altered hereby; and nothing can contribute more to ſuch an accident, than the unequal preſſure of the foot in our modern concave ſhoe.

The ſtricture of a deep cruſt, and narrow form of the foot with hard riding, and much uſe, will alſo produce an oſſification of the cartilages of the joint of the foot, from which a ſtiffneſs in the part always enſues.—And this may be called a ſpurious Anchyloſis; and oſſification frequently happens in different parts of the human body, from various unknown cauſes. —There is alſo another kind or degree of Anchyloſis, by which is to be underſtood a total loſs of motion in

the joint, the firſt admitting ſome ſmall degree of it.

In every joint there are glands, the uſe of which is to pour forth in action a mucus. To theſe are added certain veſſels, that diſcharge a thinner fluid, which, mixed with the other, makes a liniament of a proper conſiſtence, whoſe uſe is to lubricate the ends of the bones, all which, for the ſake of motion, are covered with a cartilage or griſtle.

Now when theſe glands are inflamed by motion, they grow occaſionally rigid, pour forth more ſparingly their mucus, and at length become dry and indurated.—Hence I have been led to think, this oſſification of the cartilages is a ſecondary diſorder, depending on the ſtate or quantity of this mucous liniment.

That

That inflammation attends the glands, I have ſeen frequent inſtances, where the fetlock joint of a hunted ſtag has been cut aſunder in the ſummer-time, when the leaps have been ſtrong, and the ground hard and dry; the mucus thereof having been of a very ſanguine colour.

Who now ſhall doubt, the ſame may happen to the horſe, eſpecially when another weight is added to his own?—Moreover, there are inſtances, where the mucus of the joint in human bodies has been ſo diſeaſed, either by accident, or bad habit of body, as to corrode the cartilaginous ends of the bones; and this will account for the true anchyloſis in ſome meaſure; which entire coaleſcence of a joint can

I never

never happen, without ſome ulceration in the cartilages thereof.

'The glands are liable alſo to diſeaſe, as well as other parts—and the long diſuſe of a joint from a continued and caſual lameneſs, where the glands of the ſame are not primarily concerned, is capable of producing the ſpurious anchyloſis, from the thick, and inſpiſſated ſtate of the mucus,—which inſpiſſation happens, from want of friction of the heads of the bones upon each other :—Hence the particles of this mucus not being divided, there will be a criſpitude in the ligamentous fibres of ſuch joint :—And this inſpiſſation of the mucus from any other cauſe, will account for the reaſon, why the horſe, who goes lame out of the ſtable, becomes by degrees more ſound ; namely, becauſe the heads of the bones do, by their action,

at-

attenuate this mucous fluid; whereby the parts are better lubricated—and for this diſorder, turning the horſe out, or keeping him looſe in ſome open building, will much contribute to his advantage.

Again; a joint may, in great meaſure, be deprived of its uſual motion by a redundancy of this mucous fluid; which may be produced by bad habit of body, or becauſe the veſſels appointed to abſorb, or receive the ſame, are not able to perform their office.

The fetlock joint is liable to frequent lameneſs, from blows received thereon, whereby the ligaments ſurrounding it become inflamed and rigid, and the in-teguments are thickened or indurated.

And lameneſs will be occaſioned by ſtrains of the muſcular, or tendinous parts of the leg, continued down to the foot of the horſe—from windgalls, running thruſhes, ſplints, ring-bone, canker in the foot, ſtraining the tendons of the leg, and what is called a letting-down, or relaxation of the ſinew, from broken bones, and diſlocations.

Now theſe which have been recited, are the only kinds of lameneſs, that I have ever been able to diſcover attending the fore part of the horſe—except ſuch as are occaſioned by the criſis of a fever, or by injuries received from extraneous bodies—And I have been the more particular in ſetting forth the nature of ſome of theſe, that the unſkilful may not be impoſed on by the ignorance of farriers, nor the horſe

horſe puniſhed for an incurable diſorder.

In the hinder part of the horſe, lameneſs is much leſs frequent than in the fore part, and leſs various.

A diſlocation of the hip, or whirlbone, happens very ſeldom, and whenever it does, it proceeds from a rupture of the round ligament (occaſioned by ſome violence) or an elongation of the ſame, from a diſeaſe of the part; inſtances of both which I have ſeen in a bullock and a horſe, as well as of fractures of the head of the thigh bone, and of the os ilium.

Now to diſtinguiſh with certainty the reality of theſe, it muſt be obſerved, that when the bone is broke in either of theſe caſes, the animal will in a few days begin to reſt upon that leg

leg a little, and gradually more and more, till the bone confolidates, and becomes united ; but when the round ligament is ruptured, or elongated to a certain degree, the head of the bone falls from the focket, the leg fwings, the animal cannot reft upon it at all, and by continually bearing all the weight upon the other leg, he foon becomes lame of that alfo, and at laft does not chufe to ftand at all.—Moreover, in the cafe of elongation or rupture of the round ligament, the whole limb becomes longer ; and in the cafe of a fracture of the thigh-bone, it becomes fhorter ; but in a fracture of the os ilium, this abbreviation may or may not happen, depending alone on the nature or manner of the fracture.

But the common lamenefs attending this joint is occafioned by the relaxed ftate of fome of the ligaments be-

belonging to it, brought on by ſome ſtrain at firſt, and by exerciſe continued on ſuch weak part.

From a ſudden ſtrain, or exerciſe continued on a weak part, a ſwelling will ariſe on the hock, attended by lameneſs.

From a ſudden ſtrain ſudden ſwellings will ariſe in the cavities on each ſide the hock, attended with great pain.

Of ſpavins there are two ſorts, one called the bone ſpavin, the other the blood ſpavin.

A curb is a ſwelling on the joint of the hinder leg below the hock—all theſe are generally productive of lameneſs.

Now

Now theſe different kinds of lameneſs befalling the hinder parts of the horſe, are, I think, eaſily diſtinguiſhed from each other, by their effects on the horſe, when put into motion—for inſtance—if the horſe, when made to go on, be lame in any of the muſcular parts belonging to the foot, he will endeavour to give the foot eaſe, by not ſetting it fully on the ground—if the lameneſs be in the fetlock joint, or the tendons of the leg, or proceed from windgalls, or be in the hock, or proceed from any ſwellings furrounding the hock, or be occaſioned by a curb, or ſpavins, or canker, all ſuch cauſes will be very manifeſt to the eye—if the lameneſs be in the ſtifle, he cannot ſo well perform the extenſion of the limb, but will drag his toe upon the ground, more or leſs according to the degree of injury he

he has received, as in the manner of lameneſs in the ſhoulder; and if it be in the ligaments belonging to the joint of the hip, or whirl-bone, he will in ſuch caſe reſt his foot fully upon the ground, but will halt or ſtep ſhort in his trot with that leg, and yet perhaps be very ſound in his walk; and theſe rules cannot vary, becauſe the parts affected do, from their nature and uſe, if underſtood, readily point out the true cauſe, or ſeat of complaint; that is to ſay, the motion of the limb will be certain and determinate, according to the injury done to particular parts.

Another lameneſs there is, which, according to the jockies ſtile, proceeds from humours.

Now moſt of the learned world, who have wrote on this ſubject, have

made themſelves merry with the jockies and farriers, for uſing the word humours, when the horſe is ſuppoſed to have a crazy conſtitution, or bad habit of body.

And yet herein the learned and unlearned both mean the ſame thing, as appears from the practice of the one, and writing of the other—The unlearned in this caſe adminiſter phyſick, and piſſing drinks, put in rowels, and turn to graſs; the learned recommend purging, and alteratives, and ſalt marſhes.

But as all words are arbitrary, and at the will of the impoſer, it ſeems to me of little conſequence what choice we make of words, provided always, they are uſed to bear a determinate meaning—ſo that, for the ſake of peace, diſtinction, and cuſtom, I am well

well content this good old phraſe ſhould ſtand its ground unmoleſted.

There is lameneſs then proceeding from humours; that is to ſay, the blood and juices in ſome conſtitutions are very viſcid, and not paſſing ſo readily thro' the various canals of circulation, obſtructions do ariſe, by which the ſoft parts are affected with pain, and lameneſs enſues ſometimes in one part, ſometimes in another.

Pray, why is not the word *humours* as proper here, as any other word, if not applied to any other purpoſe?

CHAP. VI.

Treats of the management of these kinds of Lameness which have been already recited.

NOW the farriers, when the cause of lameness in the fore part of the horse is not visible to them, do most frequently assert, that it is in the shoulder, and by chance, that it is in the foot.

When they allow this last to be the case, their method of acting is first to blister, and then to fire upon the coronary ring all round, at various intervals of space.

But blistering inflames, and firing contracts the coronary ring, which is, or should be of a pliant nature, and ren-

renders it more rigid; the effects of which ſeem to want no annotations.

For ſtrong and deep or narrow feet keeping at graſs, or looſe in a houſe, and ſhort ſhoes, are very beneficial; and moſt horſes with ſuch feet, eſpecially on training ground, would do full as well, perhaps better, if their fore feet were never ſhod at all, but were kept raſped ſhort at the toe, and their cruſt at the bottom was occaſionally pared down.

For lameneſs ariſing from a ſudden falſe ſtep, which, if I rightly underſtand Là Foſſe, he calls a compreſſion, and which he accounts for by the action of the coronary-bone puſhing the nut-bone againſt the tendon, and compreſſing the ſame as between an anvil and a hammer, he has propoſed two remedies, to remove the inflam-

mation

mation caufed by it, and its bad con-
fequences;—one is to draw the outer
fole—the other is to pare it, till it be-
comes thin and flexible, to bleed in
the foot, and to ufe emollient poultifes
and fomentations round the foot and
the coronet; three fourths of thefe cafes,
he fays, are cured by fuch methods with-
out drawing the fole; and I beg leave
to add, that I believe all might be,
if they were immediately taken in
hand, and the cruft or hoof was alfo
pared down as low as poffible, and
rendered thin on every part—becaufe,
the interior inflamed parts will be
more relieved by external applications,
when the thicknefs and ftricture of the
cruft are removed, than when the
outer fole only is pared away—but the
great objection I have to drawing the
fole, befides the cruelty of the opera-
tion, is, that nineteen horfes in twenty
(here in England I mean) have always
been

been more or leſs lame afterwards, when uſed again, and that from a contraction of the hoof occaſioned by ſuch operation.

And here I beg leave to add one obſervation more on the folly and abſurdity of our Engliſh ſhoers, with reſpect to their treatment of aſs-footed horſes, and which has been in part ſpoken of before.—Now horſes with ſuch feet being generally lame, it is a conſtant cuſtom with theſe men, to pare away all the outer ſole of ſuch horſes as much as poſſible, and to render their feet hollow. By this they propoſe to remove the preſſure or binding of the outer ſole upon the inner, and ſo to cure his lameneſs, which, by the bye, I never yet ſaw give ſo much as a temporary relief—but if it did, it would ſtill be a bad cuſtom—for the preſſure or binding of one ſole

upon

upon the other, is in this cafe owing to the depth and ſtrength, and contexture of the cruſt or hoof firſt compreſſing the outer ſole; ſo then by paring away the outer ſole, which helps to keep the cruſt or hoof expanded and open, ſuch cruſt or hoof is rendered deeper, ſtronger and narrower alſo, than it was before; by which addition of ſtrength, depth, and contraction, the outer ſole, as it grows again, is alſo more ſtrictly embraced and compreſſed than it was before; hence the preſſure or binding on the inner ſoul is increaſed, and that ſtill more, every time ſucho uter ſole is pared away, till the horſe at length becomes ſo lame, that he cannot well carry himſelf.

Now the proper way of treating ſuch feet is, to pare down the cruſt as much as poſſible, without falling into the

the quick, to keep the frog high, and the outer ſole full, and even with the cruſt, and to relax, and ſoften and expand the hoof by all methods.

La Foſſe directs us how to diſtinguiſh a ſtrong compreſſion (as he calls it) by a ſwelling in the coronet, and the great pain occaſioned by puſhing the thumb againſt it, two inſtances of which he gives us that were not cured, even when the ſole was drawn—Now I very much queſtion, but theſe ſwellings at the coronet deſcribed by him were partial diſlocations of the coronary-bone; and tho' I do not mean to detract in the leaſt from his merit and ſkill in the knowledge of the parts belonging to the horſe, yet I am the more inclined to think him miſtaken in this particular, becauſe he lays it down as a rule, that the coronary-bone will admit of no diſlocation,

being ſo ſecurely tied round by ligaments, tendons, cartilages, and the conſtruction of the hoof—whereas, in fact, all bones, which help to compoſe a joint, and that are capable of motion, are capable alſo of diſlocation — and that this coronary-bone is capable of motion, will be eaſily proved by the uſe of a muſcle which is inſerted into it—and the foot and paſtern-bone have each of them alſo a muſcle inſerted to them.—Now the tendons of theſe three muſcles may occaſionally perhaps become united from hard labour, ſo as to appear one tendon; and yet in fact what is commonly called the great tendon of the fore leg has three diſtinct muſcles, with three inſertions into theſe three bones before-named.

Where

Where the cartilages are offified, there is no cure; —for an anchylofis, there is no cure;—where the bones of the foot are enlarged or wafted, there is no cure.

To remove the inflammation of the glands, and to prevent an induration and enlargement of the ligamentous parts, and the in-teguments of the fet-lock joint, the conſequence of repeated violence, it is a good Cuſtom for all ſportſmen to cauſe theſe joints of the horſe, after a day's hunting, to be well fomented with flannels dipped in warm water, or a decoction of ſome emol-lient herbs; and ſome warm flannel cloths ſhould be moderately bound there-on, for the enſuing night.

For want of this, or ſome ſuch method, lameneſs (as was before ſaid) often happens to this joint.

To cure this, the farrier bliſters and fires upon the joint, by either of which methods, applied whilſt the parts are inflamed, the inflammation thereof is moſt certainly increaſed, from hence a calloſity of thoſe parts is moſt likely to be entailed for ever; inſtances enough of which we may ſee every day, and they are as contradictory to the diſorder, as endeavouring to extinguiſh fire by pouring ſpirits of wine thereon. — For a lameneſs of the tendon he uſes the ſame methods.

Now all tendons are enveloped in a ſheath, whereon are ſituate many ſmall glands, that are forced by the action of the tendons to pour forth their mucus,

cus, which ſerves as oil to lubricate the ſame, and to keep them from growing dry and rigid, as otherwiſe they would do like any other cord or ſtring.

Between this ſheath and the ſkin of the leg, where nothing intervenes but a thin membrane, what hand can determine the boundaries of theſe bodies, whoſe Appearance, by the heat of the iron, is made undiſtinguiſhable to the eye.

Now mark the event of firing.

If the fire reaches no further than the ſkin, no advantage can accrue to the tendon, but the fibres of the ſkin will become contracted, and leſs pliant; — if the fire reaches the membrane, or ſheath of the tendon, ſome of its glands are deſtroyed, and the tendon becomes more or leſs rigid. — If the

tendon

tendon be burnt, the conſequence will be ſtill worſe, and in either caſe the velocity of motion will be impeded; no man (I believe) remembring a race-horſe once fired, equal to what he was before.

In both theſe caſes, where the ſkin or ligaments ſurrounding the fetlock joint, or a tendon is inflamed or enlarged by repeated violence, or exerciſe continued on a weak or inflamed part, the following method may be uſed.

Turn your horſe looſe in ſome open building, bleed him plentifully, and give him cooling ſalts, let the injured parts be fomented twice a day with the decoction of ſome emollient herbs boiled in water, ſuch as white lilly roots, mallows, elder leaves, and flowers, bay leaves, or the like. The parts,

when

when dry, are to be filled with ſome cooling ointment, and ſome of the fomentation is to be thickened with oatmeal, to the conſiſtence of a poultice, and kept thereon.

When the induration and tenſion is gone off, a cataplaſm may be applied twice a day, compoſed of common ſalt and the white of eggs, mixed with a little vinegar and oatmel, and the parts bathed with cold vinegar (heat evaporating the ſubtle ſpirit thereof) but if theſe remedies do not avail, why then the uſe of blifters, after proper and previous evacuations, may perhaps be the means of effecting a cure, by unloading the veſſels contiguous to the parts affected.—On all theſe occaſions the horſe ſhould be turned to graſs, and indulged with proper reſt, that the diſeaſed parts may recover their former fineneſs, tone and ſtrength.

With

With reſpect to reſt, the farrier has a great advantage by bliſtering and firing, becauſe the leg is ſo inflamed hereby, that it is impoſſible to ride the horſe for a conſiderable time after the operation; ſo that if he happens to get ſound, it is generally thought to be the effect of bliſtering and fireing; which ought, in reality, to be imputed to the reſt he has had.

But when any other method has been uſed for this purpoſe, and the part looks fair to the eye, the rider mounts, his horſe is lame again the firſt day, and the groom wiſely concludes, he will never ſtand ſound without being fired.

Now let every man, who has ever ſtrained the tendons of his wriſt or ancle, reflect on the pain he has ſuffered

fered from the leaſt motion of the parts; and how long a time has been required, before he has been able to bear the extenſion of ſuch tendons, even when all appearances have been fair.—Will not the caſe be ſuch with the horſe.

And here I cannot help cenſuring the jockey, who, having his horſe matched, and in his exerciſe the tendons are ſo inflamed, that he cannot be allowed to gallop, yet conſtantly takes him out Morning and evening to give him walking exerciſe.

But this walking exerciſe can contribute little towards keeping him in wind, or making him fit for the race, yet ſtill helps to fatigue the tendon. Whereas, if the horſe was kept quiet, and proper applications applied to the injured part, it is very poſſible he might

recover ſoon enough for his purpoſe.—Therefore, when it is thought improper for him to gallop, it muſt be much better for him to lie quite ſtill; and the moſt proper applications I know of in this caſe, are to bathe the parts with cold vinegar, to rub in ſome cooling ointment when it is dry, and to renew the cataplaſm of ſalt twice a day; ſalt externally uſed, being the greateſt diſcutient I am acquainted with.

The uſe of ardent ſpirits do harm to tendinous parts when there is any tenſion, becauſe, if then apply'd, they render the fibres rigid; but when the tenſion is gone off, ſuch may help to brace and ſtrengthen the parts—a high-heel'd ſhoe will alſo be of uſe in this caſe, as it will help in ſome meaſure to keep the tendon relaxed.

Now

Now I beg leave to repeat what has been in part faid already ; namely, that all lamenefs in the tendons of a draught, road, or running horfe, happens generally from the unequal furface of our modern concave fhoe, and from robbing that tendon, which is continued to the bottom of the foot, of its proper point of fupport, by paring the frog.—Hunters indeed may occafionally get a lamenefs in the tendons, from various injuries and violence received in their different kinds of work.

The method of curing windgalls, according to the prefent mode, is various; but before any thing is faid touching this practice, it is neceffary to fhew what they are.

From ftrains, or Blows received on the tendinous or membranous parts,

the juices of the glands are poured forth, and become enveloped in a Cyſt, or Bag.

Its contents are ſimilar to the white of an egg, and the diſeaſe is correſpondent to what the ſurgeons call a ganglion on the human wriſt.

Now ſome farriers let out the contents of this encyſted tumour with a knife or lancet, which is always ſure to be filled again when the wound is healed, after having been attended with much pain. Others bliſter, which for a time ſeems to have diſcharged this ſwelling, but when the horſe comes into uſe it ſoon fills again.

Others fire upon the part, by which the outer tegument or ſkin is rendered rigid and indurated; hence the pain occaſioned by theſe tumours is greater than

than it was before, and the horſe is fit for nothing but the Cart.

But the proper method is to make an inciſion into the ſkin, and take off the ſame with the bag, and its contents; ſometimes theſe cyſts or bags lie ſuperficially on the coats of theſe three flexor tendons (which are by all writers called one, and known by the name of the great ſinew) and ſometimes they are buried and continued from one ſide of the leg to the other, through and betwixt the interſtices of theſe tendinous bodies. In ſuch caſe alſo the cyſts muſt be diſſected out, and entirely deſtroyed, or elſe the wound moſt frequently remains fiſtulous, or the cyſts fill again, but when the cyſt is not ſuperficial, the operation is very difficult, and dangerous too, on account of the horſe's ſtruggling.

And

And there are other encyſted tumours incidental to the horſe, whoſe difference conſiſts only in their contents, and which are to be cured after the ſame manner as the former.

Dogs alſo are ſubject to this diſorder on the knee, for the cure of which, bliſtering and firing are uſed; thus many a good fox-hound has been ſpoiled, that has been of more utility to the world than two farriers. —— Many of theſe laſt have I cut out with a pair of ſciſſars, leaving the cure to be finiſhed by virtue of the Dog's tongue.

Splints will ſometimes occaſion lameneſs, but if not, it is much better not to meddle with them at all; the uſe of bliſters on theſe does little more than inflame the parts, and the uſe of a hot iron often rouſes a ſleeping lion;

the

the bone of the whole leg being very often enlarged thereby; and when they do occaſion lameneſs, you may deſtroy them by a cauſtick, which may be prepared and uſed in the following manner.

Take of *Spaniſh* Flies powdered, half an ounce, oil of origanum, ſublimate corroſive, each one drachm; ſome nerve ointment, or any other, enough to make it of a proper conſiſtence; clip off the hair, and apply ſome of this to the part, repeating it occaſionally a little at a time for ſeveral days, till an eſchar begins to ſeparate, keeping the horſe's head tied up all the while, leaſt he gnaw it. —— When this eſchar appears, the medicine is to be ſcraped off, and the part anointed with ſome cooling oil; after which nothing more remains to be done, but to turn the horſe to graſs, and keep

the

the part daily touched with train oil.—By theſe means, various eſchars will ſcale off one after another, till the part becomes ſmooth and well.

But from the effect (which Mr. *Minors*, an eminent ſurgeon in *Chancery Lane*, told me) ſpirit of ſalt had on venereal nodes, I have been induced to try the virtue of it on ſplints and ſpavins, and other nodes, which, when applied with caution and prudence, is a wonderful remedy in theſe caſes; but I can by no means lay down any certain or determinate method of uſing it—being of ſuch a corroſive and active quality, that it will totally deſtroy the ligaments of the joints, if improperly uſed, or even conſume the bone of a horſe's leg in any part.

For a letting-down, or relaxation of the ſinew, Mr. *Ingram*, an eminent ſur-

ſurgeon in *Fenchurch-Street*, has already obliged the world with a remedy, which, he ſays, has been often uſed with ſucceſs; this is to make a whey with ſome allum boiled in milk, to foment the part with the whey, and to bind the curds thereon by way of cataplaſm; and after a few days, colcothar of vitriol finely powdered and mixed with white of eggs, is to be applied as a charge every twenty-four hours, and a ſmooth bandage kept on the part.—Now oil in this, or any like caſe muſt do harm, becauſe it relaxes the fibres of the tendon, which are already too much relaxed.

When the muſcles and ligaments of the ſhoulder are ſtrained, keep the horſe tied up and free from motion as much as you can;—warmth, diſcutient fomentations, or the frequent uſe of vinegar, will reſtore him to a ſound ſtate;

but the muſcular parts generally recover much ſooner than the ligamentous or tendinous.

Extenſion and counter-extenſion are proper methods of reducing all joints—Vinegar and the ſalt cataplaſm is to be uſed after the reduction of the bone, a bandage ſhould be applied round the joint, and proper reſt muſt be allowed. —Oil or ointment is to be avoided here, becauſe the fibres in theſe caſes want to be braced, and not to be relaxed, as was before obſerved.

But if there be a great diſtention or inflammation of the parts, ſuch ſhould be relaxed with oil, before the reduction of the bone is attempted.

In the caſe of a diſlocation of the hip or whirlbone, where the head of the bone is fallen down from its ſocket, either

either by rupture, or elongation of the round ligament, I believe it is in vain to think of any remedy. —But where the ligaments furrounding the joint are fuppofed to be relaxed, bliftering and firing (which are always coupled together like two hounds) are the methods generally followed.

Now bliftering, if it be ever proper, is in this cafe likely to be of ufe, by inflaming the parts, and giving a new and increafed heat to the flaccid and relaxed fibres, which may be occafionally repeated. Warm ftrengthening charges fhould be applied afterwards, and proper reft given; — but all that firing can effect, on this, or any other occafion, is, that by contracting the fibres of the fkin, the relaxed fibres of fome other adjacent part may become more ftrictly embraced; which cannot happen in the prefent cafe, becaufe

there are ſtrong muſcles intervening between the ſkin and the ligaments ; and I think that firing ſeldom is of any uſe in any kind of lameneſs whatſoever.

For the ſame reaſon, when a lameneſs happens in the ſtifle, I have found bliſtering the moſt immediate and effectual remedy. —On this occaſion, a broad piece of cloth ſhould be kept on the adjacent part of the flank of the horſe, to prevent the inflammation, which would be otherwiſe produced by ſuch bliſtering.

By repeated bliſtering, a curb is eaſily cured, if taken in time.

If the joint of the hock is much enlarged, whatever be the cauſe, there is generally a redundancy of the mucus, and the ligamentous parts and cartilages will in all probability be affected.

ed.—Here again the cuſtom is to bliſter and fire: — but here alſo, if the parts are inflamed, as they are moſt likely to be, bliſtering muſt be wrong —vinegar, or warm fomentations, with ſpirit of ſal armoniac, are to be uſed, and the cataplaſm of ſalt ſhould be uſed twice a day. — In this, or any other inflammatory caſes, cooling medicines ſhould be given inwardly, and frequent bleeding is neceſſary. — But when theſe methods prove unſucceſsful, bliſters may then be tried, tho' I have never ſeen one inſtance of their doing good in this caſe, amongſt a number of repeated trials.

But this diſorder is often incurable, becauſe the ends of the bones are in this caſe often enlarged.

When ſudden ſwellings ariſe in the cavities on each ſide of the hock, repeated

peated bleeding is neceſſary; the part is to be bathed frequently with cold vinegar, the ſalt cataplaſm is to be uſed, and ſuch a bandage with bolſters on each ſide applied, as will moſt effectually compreſs theſe ſwellings; ſo will they diſappear, and the horſe become ſound.

For a lameneſs proceeding from what is called humours, after bleeding and proper purgation, the cure is to be attempted by ſuch medicines, as will moſt effectually produce an alteration in the blood and juices; amongſt which kind of medicines I have found ſalt petre to be very efficacious, when given daily, and continued for a time; which may be done without any interruption of exerciſe, if there be no other cauſe to prevent the ſame.

For

For a canker in the foot ; — blue vitriol powdered, and bole armoniac, or vinegar added to the ſame, will generally be found a remedy. — If the caſe be obſtinate, a few drops of aqua fortis may be mixed therewith.

Running thruſhes will be cured with lint dipped in ſtrong blue vitriol-water thruſt lightly into the part ; but this diſcharge, once diverted from its uſual channel, ſome more noble part may perhaps be affected, or blindneſs enſue. —Wherefore, when this is attempted, the horſe ſhould be immediately purged two or three times, and go through a long courſe of the ſalt petre, or ſome other cooling ſalts.

The blood ſpavin is a preternatural expanſion of the veſſel paſſing over the hock ; now the general method of treat-

treating this diſorder, is to make a ligature round the vein, above and below the ſwelling, to prevent future circulation; after which, bliſtering is uſually applied to the ſwelling. — But I think it a more certain cure, to make an inciſion thro' the ſkin, upon the ſwelled part, then to paſs a ligature round the inferior part of the tumified veſſel, and to diſſect the ſuperior part of it quite out; after which it is to be dreſſed according to the methods that will be directed for wounds in general.

As to ring-bones and bone-ſpavins, I never yet ſaw any method of cure, that may be relied on as effectual.

Now the uſual method of curing theſe diſorders, is by the application of ſome medicine of a cauſtick quality, which being of neceſſity continued

nued for a time to produce an eſchar, deſtroys the hair, and always leaves behind it a certain blemiſh.

But the moſt proper method is as follows ;

Firſt, Clip the hair from the diſeaſed part—make ſeveral punctures on the ſame thro' the ſkin with a ſharp pointed inſtrument — make a longitudinal inciſion thro' the ſkin above the diſeaſed part, about the middle thereof—there introduce a cornet, and dilate the ſkin with it, as far as the ſwelling reaches. — Make another ſmaller longitudinal inciſion thro' the ſkin below the ſwelled part, directly oppoſite to the wound above, in doing which, your probe introduced at top will direct you. — At the ſuperior wound a cauſtick wrapped up in a piece of lint is to be introduced, and there left.—

The cauſtic diſſolved, is carried off by the inferior wound — the whole is directly to be covered with a warm adhæſive charge—and this is the whole of the operation.—The cauſtick thus introduced under the ſkin acts both ways, namely, on the membrane underneath it, and the outer tegument upon it — thus the membrane, outer tegument, and the charge, throw themſelves off together, and the diſeaſed or ſwelled part becomes fair and ſmooth, without any blemiſh or loſs of hair. —— The horſe ſhould be turned out, or kept in a looſe ſtable, and if the charge comes off before the wound is well, another ſhould be immediately applied. But in ſpite of this, and all other methods uſed for theſe diſorders, the horſe will very frequently remain full as lame as he was before, although the appearance of the diſeaſe is removed — the reaſon of which is, that the pæriоſteum

only

only is ſometimes diſeaſed, at other times the bone itſelf, and its cellular part. Yet I dare ſay, there is not one farrier in this kingdom, but has an infallible and certain cure for theſe diſorders.

PART II.

CHAP. I.

Treats of Wounds in general.

WITH reſpect to the treatment of wounds of the feet by puncture, the Sieur Là Foſſe has laid down ſome rules, which appear to be very accurate, and anatomically true; for which reaſon I ſhall only obſerve, and would have it laid down as a general rule, that whatever wound may happen to the coronary ring, or the cellular ſpongy part of the heel,

whether by puncture, tread, inciſion, laceration, or other accident, no medicine of an unctious nature (except in the caſe of a ſandcrack) is to be applied to the part, ſuch applications always producing fungous or ſpongy fleſh, which occaſions much pain and inconvenience to the horſe, as well as ſome trouble to get rid of.

With reſpect to the treatment of wounds in general, there ſeems but little ſkill required, eſpecially where the habit of body is good, the orifice of the wound depending, and there is room ſufficient for the matter to be diſcharged; and here may be laid down the proper method of treating wounds in general.

If an arterial blood-veſſel be wounded, the bleeding will be ſtopped, by making

making a ligature with a needle and thread round the end of the ſame.

If the hæmorrhage or bleeding be ſmall, lint dipped in flour, blue vitriol water, or even oil of vitriol (if occaſion be) will generally have the deſired effect —over this a digeſtive ſpread on tow is to be applied, and the whole covered with a poultice of bread and milk.

After two days this dreſſing ſhould come off; the part is to be fomented daily with ſome warm fomentation, the digeſtive alſo and the poultice is to be continued, till the matter appears to be well digeſted, and the fleſh of the wound begins to look of a red and florid colour—the digeſtive may be prepared in the manner following.

Take

Take of linimentum arcæi one ounce, oil of turpentine two drams, melt together.

Warm fomentations are thus made.

Take of ſage, lavender, roſemary, wormwood, centaury, chamomile flowers, or any of theſe, boil in water, and ſtrain the liquor for uſe.

When the fleſh about the wound begins to look red, nothing more is required than gradually to heal the ſame; the fomentation and digeſtive are to be laid aſide, and inſtead thereof, lint dipped in water, ſtrongly impregnated with blue vitriol, to keep down the fungous fleſh, is to be applied, and covered with a medicine, called unguentum deſiccativum rubrum, or *Turner's* Cerate.

If

If the blue lint ſhould not be ſufficient to keep down the ſpongy fleſh, ſome drops of aqua fortis may be added thereto, or the ſame may be ſprinkled with red precipitate, and covered with a pledget of the above ointment or cerate; or, inſtead of this method, take of blue vitriol powder one part, of bole armeniac four parts; this is to be ſtrewed lightly on the wound, and the ſame covered with a poultice; the quantity of the vitriol powder may be occaſionally increaſed, its uſe being to keep down the growing ſpongy fleſh.

Now the uſe of ſome ſuch medicine or poultice, continued even till the wound is healed, is much neater, and more eligible than the common method, and perhaps a better cure; for by means of theſe ſome diſcharge of matter is ſtill promoted, even till the

wound

wound be well—whereas, according to the common method of healing wounds, ſome waſh, or powder of an eſcharotick quality is generally applied to the part; hence the wound is immediately dried up, with an eſchar thereon, which ſcales off by degrees, but by ſuch immediate drying up, an indurated ſwelling often remains on the part, more eſpecially if it be ſituated near a joint.

When wounds happen to the tendon of a horſe, great pain and inflammation, perhaps a fever enſues.

I once ſaw an inſtance, where a flexor tendon of a horſe was wounded by the point of a ſharp flint (as it was ſuppoſed) in hunting.

A farrier was ſent for, who, not diſcovering this ſmall punctured wound, declared the horſe to be lame in the ſhoulder

ſhoulder (as they generally do upon all occaſions) — and to cure this ſhoulder lameneſs, he put a patten ſhoe on the foot of the ſound leg, that the horſe might be obliged to ſtand upon the lame one; which gave him ſo much pain by ſtretching the wounded fibres, that he did not chuſe to ſtand at all.

After ſome days, I was deſired by an acquaintance to look at the horſe; upon examination I found the true cauſe; the part was dreſſed with a medicine of an agglutinating quality, namely, lint dipped in equal parts of the balſam and oil of turpentine; this was covered with the digeſtive, and a poultice applied over the whole; with ſome difficulty I perſuaded the doctor to take the patten ſhoe from the foot of the ſound leg, and to put it on that of the lame one; by theſe means the horſe became well, and ſound as

ever ; — for the extreme ends of divided tendons, if brought into contact, will in a reaſonable time unite again as well as divided bones.

And here it is to be obſerved, that all tenting of wounds is a pernicious practice, by the uſe of which matter is confined, tendons, ligaments, and cartilages are injured, and bones are rendered carious or rotten ; beſides other inconveniences of pain, inflammation, and fever conſequential thereto.

In all wounds, where the matter lies lower than the orifice of the wound, and cannot flow out, it produces fiſtulous cavities in the parts—Now it is always neceſſary to go to the bottom of ſuch (where the parts will admit of inciſion (otherwiſe no cure can be expected.

This

This is the caſe with reſpect to what is called pole-evil in the neck, and fiſtula on the wither, both which would be eaſily cured if cut to the bottom, obſerving carefully to diſtinguiſh between theſe cavities, and the interſtices or diviſion of the muſcles, and not to wound the cervical ligament.

The proper method of treating theſe evils, after the neceſſary inciſions are made, and the bleeding is ſtopped, is to fill the parts with dry lint, and the wound to be treated in every reſpect according to the general rules before laid down.

Now the farriers in this caſe, after making the inciſions, always begin at the wrong end; that is to ſay, they make uſe of eſcharotic applications at the very firſt dreſſing; hence a ſuffi-

cient quantity of granulated flesh not being suffered to increase, the parts when well, become indented, with an unequal surface, and much loss of substance.

In all deep wounds of the muscular parts, caused by puncture, stabbing, or staking, the orifice of the wound should be made wider as soon as can be; for such wounds do not discharge a laudable pus or matter, by means of which, the inflammation attending them would be carried off, but a bloody ichor flows therefrom, and the wound is ever ready to become closed again, if the orifice thereof be the most narrow.

When horses are staked in any part, the common custom is to thrust a candle up the wound, as far as can be, and to keep it confined therein, by

which

which means numbers are killed ; and if any happen to live, it is entirely owing to the conſtitution of the horſe, the wideneſs of the orifice of the wound, and its depending ſtate ; for if the matter in this caſe be confined, or not well digeſted, inflammation, tenſion, gangrene, fever, and death, will certainly enſue.

Now the proper method of acting in this caſe, is to make a crucial inciſion in the orifice of the wound in this manner +, ſufficiently wide for the matter to be diſcharged, according to the nature of the parts, and the ſituation of the wound.

The lips of this inciſed wound are to be filled with lint, thruſt gently between them, to prevent their uniting again ; and if any conſiderable effuſion of blood attend this inciſion, it

will

will be ſtopped by ſuch methods as have been before directed for this purpoſe, and by various others — this is to be covered with the digeſtive before-named, and a poultice applied over the whole —this dreſſing is to remain on the part two days, after which ſuch methods are to be uſed as directed for wounds in general.

When ſhallow punctures happen on the joints or limbs from thorns, ſtubs, or other ſharp bodies, if ſuch reach the ligamentous or tendinous parts, the ſmall diſcharge flowing therefrom, once ſtopped by a medicine of a repelling or diſcutient quality, will generally produce great inflammation, with other bad ſymptoms, and much matter may be formed—and yet I have known ſeveral inſtances of ſuch punctures, both in the equine and human ſpecies, cured by fomentation, and the uſe of ſalt—

But

But in all ſuch kinds of punctures, emollient fomentations, with a poultice made of bread and milk, or oatmeal and ſtrong beer grounds, kept on the part, are the proper methods of cure.

In lacerated wounds of the ſkin or muſcles, a needle and thread may be uſed to unite the divided parts (according to the depth and nature of the wound) leaving proper intervals of ſpace between each ſtitch for the matter to flow out; but if great inflammation enſue, and much matter be produced, and lodged in the part, it is neceſſary to cut away the ſtitches, and the inflammation will ceaſe; but wounds of the ſkin will generally be cured by the application of lint dipped in Friars balſam.

Inciſed wounds will alſo be cured (in general) by the ſame means.

In

In gun-ſhot wounds, the methods before directed will take place, all foreign bodies being firſt extracted, if it can be done.

If any induration remain on any part when the inflammation is gone off, whether it be the effect of drying up a wound too faſt, or the conſequence of a puncture by a thorn, or other accident, the parts ſhould be well embrocated with ſome cooling ointment, with the uſe of emollient poultices and fomentations.

CHAP.

CHAP. II.

Treats of various other incidents to which the horſe is liable to.

IT frequently happens, for want of proper care in bleeding at the neck, or afterwards, that a ſwelling falls on the part, attended with many bad ſymptoms; ſometimes with the loſs of the vein, ſometimes with gangrene, and ſubſequent death.

Now this is generally a long time in hand, yet may as generally be cured in a few days, by the following means.

As ſoon as you perceive this evil, the uſe of warm fomentations, cooling ointment, and a poultice of bread and milk, will very probably remove the ſame.

But if theſe methods do not ſucceed, a rowel is to be put into the ſkin, in the middle of the horſe's boſom, and with a tobacco-pipe, or any other tube, blow up the ſkin quite to the part affected; ſo will an immediate derivation be made therefrom as ſoon as the rowel runs.

If any ſwelling or induration ſtill remains on the neck, it will now be removed by poultice and fomentations, or the following mixture.

Take of ſpirit of wine four ounces, camphor and bole powdered, each one dram, aqua fortis twenty drops, dip ſome lint or tow in ſome of this, apply to the part, and bind over it ſome warm thick cloaths, without which, this application does no good on any occaſion.

When

When ſwellings happen on any part of the back or wither, from bruiſes of the ſaddle, this laſt medicine is of more efficacy than any other I am acquainted with—for it will in a few days diſſipate ſuch ſwelling entirely, or bring it to matter; and what is particular, when matter is produced, the ſwelling itſelf is of much leſs magnitude than it would be, by any other application productive of matter.

This may be uſed twice a day, rubbing ſome of it upon the ſwelling, and wetting ſome lint or tow therewith, to be bound on the part.

But if matter be formed in this caſe, as ſoon as you perceive it to fluctuate under the finger, it is to be let out with a knife—ſome lint dipped in this mixture, and applied to the part once or

twice a day, will cure the ſame, without any digeſtive or other means. It will alſo cure a rawneſs on the back, or other part, if the fungous fleſh be not grown too high.

Encyſted tumours will alſo happen from bruiſes by the ſaddle on various parts of the back.—Which are to be cured like other encyſted tumours, by taking out the bag and its contents.

If in taking out an encyſted tumour the bag ſhould be wounded, and its contents let out, which may happen to any artiſt, care ſhould be taken to deſtroy the bag as much as may be with the knife—which is to be dreſſed with the digeſtive and poultice; and when the wound appears red and florid, according to the general method before directed.

When

When a canker happens to the tongue of the horſe, take of oil of turpentine and oil of vitriol equal quantities; touch the ſore part with a rag tied on a ſtick, and dipped herein; it will cure the ſame, repeated at proper intervals.

PART III.

CHAP. I.

Treats of Diſeaſes.

WITH reſpect to the various diſeaſes of horſes, I think there are ſome not rightly underſtood, as well as various kinds of lameneſs—and from the attention I have paid thereto, and the ſubſequent events, I believe I ſhall be able to ſhew, that all the learned authors, who have wrote

wrote on this ſubject, have been as much miſtaken in the nature and cure of ſome of theſe, as the farriers—— Which authors have alſo made many uſeleſs diſtinctions of diſeaſes, that tend only to perplex the reader, by multiplying the number, ſome of which do not exiſt at all, at leaſt not in ſuch a manner, as they are ſet forth.

In the year 1750, I think it was, that the diſtemper amongſt the horſes (as it is called) was more univerſal than at any other time.

Various were the ſymptoms, and different the degrees of illneſs amongſt different horſes. Some had a diſcharge of matter from their eyes, noſe, and mouth, others had none; but in all there were great tokens of inflammation, attended with a fever, and a violent cough.

I had

I had at that time in *London* a favourite horſe, that was ſeized, amongſt a number of others at a livery ſtable, with this diſtemper; he had no diſcharge of any kind, but had a dry cough, and a violent fever, was very dejected, would touch nothing, and was more likely, as I thought, to die, than to live.

I was very anxious about the welfare of my horſe, and having never ſeen any thing like this kind of illneſs before, I adviſed with ſuch people, as I thought had moſt right to underſtand the nature of it—from whom I received no ſatisfaction, all being at a loſs in what manner to act.

So moſt of thoſe horſes which had a plentiful diſcharge of matter from the noſe, &c. lived, and where ſuch diſcharge did

did not happen, nor a critical abſceſs fall on ſome part, moſt of them in *London* died. —— My horſe continued in the ſame ſituation two or three days; and I was ſtill over-perſuaded not to meddle with him, but to wait in expectation of what nature might do, by promoting ſome diſcharge, which yet did not happen.——In this dilemma I viſited ſeveral horſes juſt dead with this diſtemper, who had no diſcharge from the noſe, &c. in hopes of diſcovering the cauſe of their death, and finding a remedy. — On many of theſe I made ſeveral inciſions in the ſkin, on various parts of the body; and wherever an inciſion was made, I found in all of them a quantity of extravaſated ſerum, lodged between the ſkin and the membranes.

I was no longer in doubt what was to be done, but immediately ordered him

him to be bled, and ſeveral rowels were put into the horſe, to the number of ſix or eight — which the by-ſtanders ſaid would ſoon mortify, and the poor horſe was condemned to die.

But, behold, in about thirty hours he held up his head, began to look chearful, and to eat his meat; and, in another day, became as apparently well, as ever he was in his life.

And yet, after all this diſcharge, when the rowels were taken out, and he had been twice purged, an ædematous ſwelling ſoon after fell into one leg and thigh, which, I apprehend, might ariſe from the vitiated ſtate of the blood and juices, or from too briſk an operation of the phyſick in ſuch a depraved habit of body.

Now, to the beſt of my remembrance, there is no knowledge falls to any man's ſhare in any ſcience, phyſical or other, but what is acquired by experience and reflection.

Upon reflection then of the ſucceſs of theſe rowels on my own horſe, I began to think, that the uſe of them, even on horſes that had a diſcharge at the noſe, might be very conducive and aſſiſtant to the cure, where nature, as I thought, plainly indicated the way, in endeavouring to throw off the diſeaſe by ſuch diſcharge—and by nature alone, as I have been told, the phyſician ſhould always be guided. — And on trying the effects of rowels upon horſes who had a diſcharge at the noſe, I found my expectations anſwered, and they got over it much ſooner than thoſe which had no ſuch aſſiſtance.

From

From the good diſcovered of promoting ſecretions of one kind, I conſidered it might be ſtill better, if other ſecretions could be promoted alſo at the ſame time, which would help to cool the inflamed blood, as well as to unload the veſſels, and conſequently to abate the fever; and for this purpoſe cooling ſalts are a proper medicine.

So when the horſe is ſeized with this diſtemper, he ſhould be treated according to the different ſymptoms that attend him.

If he has a violent fever, with a dry cough, and there be no concomitant diſcharge or running at the noſe, he ſhould be bled largely.

If a diſcharge at the noſe appears, bleeding will be found to do harm, being contrary to the attempt of nature in ſuch diſcharge; but in both theſe circumſtances, he ſhould take cooling ſalts every ſix hours, three or four rowels ſhould be put in various parts, where the ſkin is looſe, the excrement ſhould be often raked from him; if he be coſtive, cooling and laxative clyſters ſhould be given.

Now ſome of the writers on the ſubject of horſes have given mighty cautions againſt the uſe of rowels in feveriſh diſorders, and talk of the danger of mortifications attending them, when in reality there needs no ſuch fear. But allowing it to happen by chance, it could not be deemed a ſufficient reaſon againſt the univerſality of the practice, any more than it would be

be againſt the uſe of bliſters on the human body; becauſe ſome men in a fever by chance have died with a mortification on the bliſtered part.

But if any ſuch ſymptom as a gangrene ſhould appear, on this or any other occaſion, warm fomentations, with ſome ſpirits of wine added at the time of uſing it, and a poultice made with oatmeal, cummin ſeed, and the grounds of ſtrong beer, to be kept on the part, are the proper remedies.

Since the Year 1750, this diſeaſe has viſited by turns each ſtud and ſtable, has fallen on horſes of all ages, at various ſeaſons of the year, and in different ſhapes; wherever it comes I believe none eſcape; and when it falls on ſucking foals, they are generally ſtunted and ſpoiled.

I hap-

I happened laſt ſummer to be at the houſe of an acquaintance, who had a large ſtud of mares and colts, of various ages, ill with this diſtemper.

They were attacked in various forms, ſome had a diſcharge from the eyes, noſe and mouth, ſome had critical ſwellings fell on the udder, ſome on the ſhoulder, others on the ſide of the jaws, under the jaw, and on other parts.

As they fell ill they were taken to houſe; and I ſtaid at this place ſeveral weeks, to try what methods of treatment might be of moſt ſervice to the animal; and to make ſuch obſervations thereon, as might contribute to future uſe.

They were bled, or rowelled according to their different age and ſymptoms,

toms, and ſalt petre was given them, by which means they all became ſoon well, except the ſucking foals.

When critical ſwellings appeared, I made a large inciſion on the part, and let out large quantities of matter.

The ſurgeons generally eſteem a critical abſceſs in ſuch caſe to be a certain cure; and tho' I am very certain, that I did not open one ſwelling, till it was fit for the operation, and which contained at the time laudable matter, yet ſo much is the blood ſometimes vitiated with this diſorder, that after the wound was well, many of them had other critical ſwellings fell on other parts, again and again, which when ripe were all opened, and by which means at length they alſo became well.

Others (as ſoon as ever the ſwelling appeared on any part) were bled, had ſeveral ſetons put in the ſkin, ſome on the depending part of the ſwelling, and the ſalt petre was given, thinking by theſe evacuations to divert the febrile matter, and effect a cure. — But after a trial of many days, I found this method of no uſe, the ſwelling all this time neither advancing nor receding.

Upon which the ſetons were taken out, the ſalt petre left off, and in a few days the ſwelling came to good matter, by the diſcharge of which the horſe got well in due courſe of time.

But for the ſucking foals no remedy availed, the diſeaſe baffling all attempts of art and nature.

If you bled them, a ſwelling perhaps came on the part, and would remain indurated for ſeveral months, which was neither to be diſſipated, nor brought to matter; the ſame kind of indurations would alſo fall on other parts.

If matter was formed, and let out, freſh ſwellings ſucceeded each other, or ſome other ſymptoms of the diſeaſe remained for ſeveral months, even till they were weaned—The cauſe of which I think is very evident.

Now the mare that gives ſuck is never, at leaſt that I could perceive, affected with this diſeaſe, which, in all probability, proceeds from the conſtant ſecretion of her milk, by means of which her veſſels are ſtill kept emptied, and herſelf free from any ſymptoms of a fe-

ver, and yet her blood may be much vitiated and corrupted.

I have ſeen ſeveral foals at the mare's foot, whoſe blood has been ſo poor, as to occaſion their legs to ſwell, even when they have been running about in the field; which ſame foals, if continued to have ſucked much longer, muſt inevitably have died — And yet when taken from the mare and weaned, have been ſoon recovered by the ſame means, that before were found ineffectual. — From which inſtances I am ready to conclude, this long continued illneſs of the foal, is entirely owing to the depravity of the mare's milk.

Now if we are lucky enough to diſcover the cauſe, it is twenty to one but we find a remedy.

And in order to this, it will be neceſſary to think of altering the blood and juices of the mare, — to anſwer which deſign, ſhe ſhould be bled two or three times, and take ſome cooling ſalts every day, and the ſame given to the foal once a day, or oftner (if occaſion be) with the uſe of ſetons, will be the means of curing him alſo; the milk of the mare ſhould be drawn from her, unleſs you propoſe to wean the foal — if not, ſuch foal is to be ſupported with cows milk, mixed with flour, till his health is reinſtated, by which time the habit of body in the mare will be amended alſo.

When a critical ſwelling appears on any part, all means uſed to divert it are wrong, and ineffectual, but a poultice of bread and milk ſhould be applied to the part to forward the mat-

ter, which when ripe, and not before, is to be let out by a proper inciſion, and to prevent any future ſwellings on the ſame, or other parts, ſome diſcharge ſhould be continued for a time by an artificial drain, with the daily uſe of ſome cooling ſalts to correct the vitiated blood.

And I have of late followed a method ſomewhat different from rowels or ſetons, tho' analogous thereto, which I think much better than either of them, becauſe it ſooner brings on a diſcharge, and that in more abundance, is attended with leſs inflammation, and may be continued as long as you pleaſe, — and this is, to make a number of inciſions into the ſkin on any part where it is looſe, to dilate or ſeparate the ſame with your finger all round as far as it will reach, and moderately to fill ſuch part every day with lint or tow dipt

dipt in the digeſtive directed for wounds, firſt taking out the former dreſſing.

By theſe methods all the ſymptoms attending this diſeaſe in every age will be removed, and its deſtructive conſequences prevented.

Now amongſt critical ſwellings, I think the ſtrangles may juſtly be reckoned, the ſituation of which diſorder is under the jaw, whence I ſuppoſe it may derive its name.

In all theſe caſes horſes ſhould be kept warm, and by no means go out of the ſtable whilſt matter is forming; — this alſo is to be treated after the general method laid down for other abſceſſes or critical ſwellings. And here too the uſe of inciſions in the ſkin as drains, and cooling ſalts will be very proper after the ſwelling or

wound

wound is become well — for this also is the crisis of a fever, tho' it happens to all colts sooner or later, and falls on the same part.

And here I cannot help relating an instance of the most gross ignorance, which I once saw committed by a farrier of mighty fame. — A horse had been ill with the distemper, and nature had been kind enough to form a critical swelling on the back, in which there was matter ripe and fit to let out — The Doctor came, but instead of letting it out, he made use of a discutient fomentation, by means of which, if the matter could have been repelled, and again taken into the circulation, the animal must have died a most wretched death.

And here is a proper time to shew, that the learned authors, who have

wrote on this ſubject, have been much miſtaken with reſpect to the nature of ſome diſeaſes.

For inſtance, the mad-ſtaggers is treated by all writers as an apoplectic or nervous diſorder — which nervous diſorder is a ſomething they know not what; and is a kind of ſubterfuge for what they do not know.

But the mad-ſtaggers is in reality a fever, of which I have cured many horſes by the ſame means, as thoſe directed for the fever, called the diſtemper.—And all the different diſeaſes called by the name of convulſions, epilepſy, vertigo, and apoplexy, are nineteen times in twenty ſecondary effects, or ſymptoms of a fever.—Juſt ſo it is amongſt men, ſome of whom have with a fever the concomitant ſymptoms of coma, or ſleepineſs, delirium or madneſs,

ſpaſms,

ſpaſms, convulſions, &c. yet theſe are always treated as real diſeaſes in horſes by our farriers, who, to give the ſtrongeſt proofs they can of their ignorance in theſe matters have lately found out a new way, by which they expect to cure theſe diſorders, and that is, by giving the horſe a drench through the noſe inſtead of the mouth.—If horſes were to doctor men, could they act with leſs rationality ?

But ſome of theſe ſymptoms called by the names of vertigo, apoplexy and epilepſy, may happen to the horſe from repletion, when there is no apparent fever, and from various other cauſes ; for inſtance, the worms in horſes, as well as in men, will occaſionally produce the appearance of all diſeaſes—Now theſe concomitant ſymptoms of delirium, coma, convulſions, &c. do not require our particular attention

tention in horſes as in men; but when the fever is attended with ſuch ſymptoms, large and repeated bleeding is your chief dependance, more eſpecially if the jaws are ſhut ſo faſt, as to render it impoſſible to give the horſe any internal medicine — inciſions of the ſkin as drains, and clyſters ſhould be uſed, and nitre given internally, as ſoon as you can open the horſe's mouth, taking care to join ſome laxative ſalts with it, to keep the horſe's body open, or rather looſe.

Now I'll tell you a ſtory.

A horſe mad with the ſtaggers broke out of a ſtable belonging to a powder-mill, and got to a large ciſtern of water, in which ſo much ſalt petre was diſſolved, that it was barely in a ſtate of fluidity—He drank, or rather ſwallowed ſeveral gallons; this ſoon promoted

moted a very copious ſecretion by the urinary paſſages, after which he became immediately well, without any other aſſiſtance.

I mention this to ſhew, the good effects of nitre in fevers, and that ſome horſes are able to take any quantity of this ſalt; and yet others, from a difference of conſtitution, more particularly when they eat graſs, ſhall not be able to take the ſmalleſt quantity, without being affected with gripes or cholick, therefore it is always beſt to begin with a ſmall quantity, not leſs than an ounce, which ſhould be mixed, and made into a ball with ſome mucilage of gum Arabic; and if the horſe be not affected with cholicky pains, the doſe may by degrees be increaſed to a greater quantity, according to the different age and ſymptoms — But when gripes enſue from the uſe of this ſalt given

given in ſmall quantities, you will find, that tartar ſolubile, ſal regeneratum, or any ſuch kind of neutral ſalt, will anſwer your purpoſe given twice or thrice a day in ſuch quantities, as you would uſe nitre.

When the horſe is thrown into a fever by hard riding (which the farriers call melting the greaſe, and writers alſo) he will be cured by theſe methods.

Now this melting the greaſe is nothing more or leſs than the ferous particles of the blood, extravaſated by too much heat and labour, which may be found betwixt the ſkin and the membranes, when the horſe dies of this, and of ſome other inflammatory fevers.

By the ſame means the pampered ſtallion is ſaved, who has revelled in love and plenty all the ſummer. ——

These are happily joined together. — But when the heat of autumn comes, and the seminal discharges are over, he is still fed as high as ever — from which full habit of body fevers often arise in various Shapes, and death ensues.

Now what can be expected from such who live in a constant series of indolence and luxury, but a dull, diseased, phlegmatick race? wherefore, when the covering season is over, he should have more exercise, and less food; and when the spring comes on, he may be allowed to live more plentifully, by which he will acquire fresh spirits, and new vigour to perform the feats of love.

And thus every kind of fever in horses will be most frequently cured, if taken in hand before the juices are

fallen

fallen into a ſtate of putrefaction, remembring ſtill that horſes are mortal, as well as men; but theſe methods are founded on reaſon, and the obſervation of nature's laws, and confirmed by experience, which is all that phyſical knowledge ever yet pretended to.

The uſe of cooling ſalts, with proper bleeding and clyſters, will generally be ſufficient to remove moſt common fevers; yet if the caſe appear urgent and dangerous, then, by way of ſecurity, inciſions of the ſkin as drains ſhould be uſed alſo. — For want of ſuch ſecretions and evacuations, the horſe, tho' he may happen to recover of his fever, is liable to, and often is ruined by conſequential diſorders, ſuch as the farcy, broken windedneſs, tubercles of the lungs, conſumption, glanders, and ædematous local ſwellings, that are never removed.

To

To this the learned may perhaps object, that ſo many different evacuations and ſecretions, promoted by bleeding, drains, and nitre, uſed all together, impede the operation of each other—With all my heart, I don't know but they may — yet theſe united help to abate the inflammation, attenuate the fluids, and diſcharge the ſame, better than either of them uſed alone — And my deſign is, not to trouble the reader with any ſpeculative matters, but to tell him a plain ſtory, which he may eaſily underſtand; and to ſhew him ſome rules, whereby he may ſave forty-nine horſes out of fifty in every kind of fever, without applying to any farrier, who moſt times is in theſe diſorders a greater enemy to the horſe than the diſeaſe itſelf.

There

There are two diſeaſes indiſcriminately called by the name of the yellows, which being different in their nature, ſeem to require ſome diſtinction, and the more ſo, becauſe they will require to be treated in a manner ſomewhat different.

One is an inflammatory fever, attended with ſuch ſymptoms, as appertain in general, to that which is commonly called the diſtemper in horſes, with a diſcharge of a yellow ſerous matter from the eyes and noſe, &c. and is generally produced by heat, and cloſe ſtabling.

In this caſe bleeding is improper, becauſe the efforts of nature are thereby impeded, but drains, ſalts and clyſters will take place as in other inflammatory fevers.

The

The other where the finer veſſels, and the cuticle of the eye are tinged with a yellow hue, and not attended with a diſcharge from the noſe, &c. is the effect of obſtructed bile—Here bleeding (tho' always uſed) muſt be very improper, when there are no tokens of inflammation, and rowels in this caſe can do no good, but nitre and antimony, and Caſtile ſoap, with a decoction of madder root, given twice a day, are the proper remedies.

By the daily uſe of ſalt petre alone, continued as an alterative after the diſtemper, I have rode my horſe a fox-hunting in half the time that I could have done, if he had gone through a courſe of phyſick, and he has performed as well in every reſpect.

If ſuch are the effects of cooling Medicines in fevers, what is to be expected from a contrary treatment, or the inconſiſtent medley of cordials, noſtrums, and ſpecificks, given by grooms and farriers, without knowing the leaſt tittle of anatomy, or the animal œcónomy, without ſo much as knowing wherein the diſorder conſiſts, or even the nature of the medicine they uſe as a remedy—But, however, not to detract from the merit of theſe men, it muſt be granted, that what they want in knowledge is amply ſupplied by the goodneſs of their receipts. And it would be a very hard caſe indeed, if in a receipt, conſiſting of a great number and variety of articles, one of them ſhould not happen (as they ſay) to lay hold of the diſeaſe.

Now nine and twenty different ingredients will moſt certainly make a very good receipt, but if it exceeds thirty, no malady of any ſort can ſtand before it.

Will their knowledge of a proper treatment, of tumours, wounds, and various lameneſs, without being acquainted with the nature and uſe of the component parts, be more extenſive than it is in the proper treatment of diſeaſes? — But time and reſt, and wonder-working nature, and the ſimplicity of the horſe's food, oftentimes effect a cure in ſpite of all their abſurd applications, which they from vanity and ignorance conclude to be the effect of their own ſkill.

I'll tell you another ſtory.

A man

A man was inoculated for the ſmall pox, in the interval of time, between that and the eruption, he was ſeized with the gout in both feet.—He was ordered to apply flannels to the ſame, and when the pock came out, he had none but upon his feet, which were very full.

I mention this to ſhew, what evils may be produced by heat; and for the learned to conſider, what future good may in ſuch caſes be derived from local acquired heat.

And here occurs to me the wrong judgment of the jockey, in ſtopping every avenue, even to the key-hole of the ſtable door, whereby the pure nitrous air is excluded from the faintly reſpiring horſe—Hence the ſerous particles of the blood are diſcharged —

Hence fevers appear in different ſhapes, and variety of illneſs is produced from not diſtinguiſhing between the effects of heat and warmth.

And here may be juſtly ſaid (what was ſaid before about the lameneſs of horſes) that nineteen times in twenty the diſeaſes befalling all horſes, are occaſioned by too much heat, and too confined air.

Now, to the beſt of my obſervation, what is called the diſtemper amongſt the horned cattle, is exactly correſpondent to the diſtemper amongſt the horſes, the ſymptoms in each animal being ſimilar in all reſpects. —— And the diſcharge from the noſtrils, &c. of the cow in theſe fevers, about the nature of which, and of this diſtemper, there has been abundance of fine writing, is nothing elſe, but an extra-

extravaſation of the ſerous particles of the blood, th effect of inflammation —and therefore, in obedience to the attempts of nature, our buſineſs is to invent all the methods we can to carry off this extravaſated ſerum,—and the inciſions, as before directed for the horſe, made in the ſkin of the cow, will, as it does in horſes with the ſame ſort of fever, produce in twenty-four hours a naſty fœtid purulent matter.— By a number of theſe drains the parts will be unloaded, and the animal relieved,—and they do in every kind of fever amongſt horſes, and I dare ſay will too amongſt the cows, anſwer nearly the ſame end, and purpoſe, as a critical abſceſs. But when no critical abſceſs happens, or no artificial drains are made uſe of, the natural one's, not being ſufficient to carry off the extravaſated ſerum, the viſcera, and more noble parts, are in time affected, the blood and juices

deviate

deviate by degrees into a ſtate of putrefaction and corruption, and the animal dies a moſt wretched death.

If any man object and ſay, this diſtemper of the cows is infectious, and therefore it is of the putrid, and not of the inflammatory kind:—I anſwer, that it does not appear to be infectious, becauſe ſome cows amongſt a number of infected ones have eſcaped it—— and that theſe animals are not ſubject to putrid fevers, as men are, from the difference of their food.—But allowing it to be of the putrid or peſtilential kind, and to ariſe from air, infection, or both, theſe artificial drains made in the ſkin will ſtill be very proper, becauſe they will anſwer in ſome meaſure the ſame end, as the bubo or critical impoſthume befalling the human ſpecies in peſtilential diſorders — if they are properly managed.—And here it

may

may be obſerved, that when diſtem-pered cows have eſcaped death, it has been generally owing to ſome critical abſceſs, various inſtances of which I have ſeen.

To theſe artificial drains ſhould be added the uſe of cooling ſalts, and laxative clyſters, if needful.

It is neceſſary to obſerve, that bleeding the horſe or cow will be wrong, and muſt do harm, when a diſcharge from the noſtrils, &c. is be-gun, becauſe it is contrary to the effort of nature; and ſo it is when there is any ſwelling that is tending to matter, which kinds of ſwelling can be diſtinguiſhed by the ſkilful only.

From the obſervations I have made on the diſeaſes of theſe animals, and from the fameneſs and ſimplicity of their

their food, I think there is great reaſon to believe, that the ſame remedies will have the ſame effect in one ſpecies as in the other —— and it is much to be wiſhed, that the legiſlative power will give the farmers leave (whenever this diſtemper ſhall again appear) to make trial thereof, and oblige them to deliver in, at ſome proper place, the ſymptoms of this diſeaſe, and the effect of theſe propoſed remedies.

Now the author's ſole motive in publiſhing this is the good of the community:—but if theſe methods ſhould prove ſucceſsful, particular men will be alſo benefited—For the College of Phyſicians will be prevented the trouble of any future meetings on this occaſion; and the good biſhops will avoid the fatigue of compoſing pious forms of prayer to deprecate this evil—as if the Almighty Being (like an earthly prince)

prince) was to be influenced by human entreaties to alter his general laws, whereby all things are governed—not conſidering, that natural evil muſt unavoidably happen to the creatures of this earthly ſtate, from the contingencies of food and climate.

There is another diſorder incident to bullocks, which the graziers call being hove or ſprung; that is to ſay, the animal, from overcharging the ſtomach, is ſwelled in ſuch a manner, as to bring on ſpeedy death, unleſs ſoon relieved, all digeſtion being at a ſtand.—This will be cured by raking the excrement from the ſtrait gut, and by ſalt petre, or any laxative ſalt given plentifully—or by ſea-water, — and bleeding, will ſo far do good, as to alleviate the part affected.

When a Strangury befals the horſe or bullock, bleeding, taking away the excrements, clyſters and ſalt-petre, with other laxative ſalts, plentifully given in ſome barley-water, with gum Arabick diſſolved therein, are the proper methods of cure—if theſe methods fail, opium ſhould be given—Now it ſometimes happens, that theſe animals have encyſted tumours on the neck of the bladder, in which caſe I apprehend neither ſalt petre, nor any other medicine, will have any effect.

CHAP. II.

Treats of other diſorders, to which the horſe is liable.

WHEN recent coughs or colds happen, bleeding, repeated if neceſſary, warm moiſt diet, and the following medicine, will generally remove

move it.—Take two ounces of cold drawn linſeed oil, of ſalt petre one ounce, volatile ſalt of hartſhorn two drachms; this is to be given daily in ſome linſeed, or liquorice tea, barley-water, or any ſuch kind of vehicle; and above all things, let him be kept within doors, air and motion irritating the parts affected.

Let no man lend an ear to the advertiſements of cures for broken-winded horſes, how pompous ſoever they may appear—becauſe, in this caſe, certain glands (called the lymphatick) which are placed upon the air-pipe at its entrance into the lungs, are become enlarged, and thereby the diameter of the tube is leſſened —— hence the received air cannot ſo readily make its eſcape, nor reſpiration be performed with ſuch facility as before—from which quantity of contained air the lobes

of the lungs are always enlarged, as may be ſeen by examining the carcaſes of broken-winding horſes, after they are dead.

Gripes or cholick are of two kinds; one proceeding from the drinking of cold water, the other from coſtiveneſs, and ſubſequent heat and inflammation of the bowels.

The firſt is cured by giving one ounce of philonium romanum, and by repeating it, if there be occaſion.

In the ſecond, bleeding is proper; which ſhould be repeated if neceſſary, that is, if the pain appear to be very violent,—the excrement ſhould be kept raked away, as it falls into the rectum, or ſtrait gut.—Sweet oil ſhould be given inwardly to relax the inteſtines,—and cooling laxative ſalts, every four hours,

to

to unload the ſame, for which purpoſe the neutral purging ſalts are the beſt, ſuch as glauber ſalt, ſal catharticum, with tartar ſoluble, &c. and oil given by way of clyſters will alſo be of uſe in this caſe.—Here ſalt petre is not ſo proper, becauſe it acts as a diuretic, rather than a laxative.

Now this laſt kind of cholick, proceeding from coſtiveneſs and inflammation of the bowels, is what the writers and farriers call the ſtrangullion, or twiſting of the guts, and ſuch they ſuppoſe it to be—yet this never happens, but the truth is—that certain particles or pieces of dung or excrement in paſing thro' the guts, becoming hard and indurated from a degree of dryneſs, the ſpace of the gut where it reſts, is ſtretched and enlarged,—hence follows a narrowneſs or ſtricture round the adjacent part of the ſame, ſo that

the

the excrement cannot pass along—this occasions an inflammation, and the horse, if not soon relieved by cooling and relaxing medicines, dies of a mortification in such part—another cause may be a natural inflammation of some part of the intestines, where the excrement is not so lodged.

Thus you see how necessary it is carefully to distinguish betwixt these different kinds of cholick, which will be best done by observing whether there be a fever attending it or not—to ascertain the existence of which, or not, the pulsation of the artery is to be consulted, which may be felt on the hinder part of the fore leg, either above or below the knee of the horse.—— Moreover, the horse in this last case will be frequently looking back into his flank, by which he points out in some measure the seat and nature of his

his diſeaſe, tho' not with abſolute certainty — for the ſame ſymptoms will attend the horſe afflicted with the ſtone or gravel (which by the bye I believe very ſeldom happens) but much certainty may be gathered even with reſpect to the difference of theſe complaints, by paying due attention to the nature and dryneſs of his dung or excrements, or his frequent attempts and motions to void his urine.—But which ſoever of theſe is the diſeaſe, thus far you will be right, that theſe remedies will be proper in each of theſe complaints.

With reſpect to forms of phyſick, every groom and every farrier has his receipts, which he ſtill thinks the beſt ——Now perhaps the ingredients given in general may have much the ſame effect——and if any miſchief befal the horſe, it is much more frequently owing

owing to bad management, than to the phyſick itſelf.

Yet ſuch medicines as are of a ſtimulating nature ſhould be avoided, becauſe they greatly deprive the inteſtines of that mucus, which is deſigned to line and guard them—from the appearance of which mucus amongſt the dung of the horſe, the farrier gravely and wiſely remarks, that he is very foul.

The miſchief that generally happens to the horſe in phyſick is owing to this cauſe; namely, that the medicines, not working ſo much, nor ſo readily as may be wiſhed, the horſe is trotted about till he is ready to drop, is thrown into a heat, perhaps a ſweat, by raiſing which new ſecretion, the purging is entirely ſtopped, and a fever enſues, which terminates in the loſs of

of eyes, of feet, or in death; many inſtances of all which I have known.

When the criſis of a fever falls on the feet, on this or any other occaſion, the proper method of acting is to cut them off round and ſhort at the toe, till the blood appears, and with a drawing knife to ſcore the hoof all round longitudinally at proper intervals of ſpace (till you reach the quick) beginning a little below the coronary ring, and continuing the ſame to the end of the foot or toe; hence the new hoof will have more liberty to puſh itſelf out, and the matter to be diſcharged; the parts are to be dreſſed with ſome unctious medicine, and the whole foot to be wrapped up with an emollient poultice—by which means the feet will often become as good and ſound as ever.

Now this laſt method of ſcoring the foot longitudinally is of late come much into practice, with an intent to cure lameneſs ariſing from the contracted form of the ſame; which method, together with being turned to graſs, expands the foot for a time; but when theſe ſcorings are quite grown out, and the horſe is taken to houſe, ſuch foot returns again in a ſhort time to its primitive natural contracted ſtate, and he becomes juſt as lame as he was before.

Of diſeaſes of the eye I have little at preſent to ſay, having never ſeen any method of acting, but what is uncertain, and cannot be relied on, yet frequent bleeding, and the uſe of cooling laxative ſalts often are of great ſervice.

There are ſo many forms of purging already preſcribed, which, for any thing

thing I know to the contrary, may be all equally good, that it ſeems needleſs here to direct any; yet, for the reader's amuſement, I ſhall relate my own method.

I take of *Barbadoes* aloes a ſufficient quantity, which given from one ounce to one and an half, is enough for moſt horſes; of powdered jallap two drachms, and becauſe this rezinous gum remains long in the ſtomach without diſſolving, I add three drachms of ſalt of tartar, which is the proper menſtruum or diſſoluent thereof; and to prevent griping, I add one ounce of ginger powdered.

But if the ſalt of tartar be mixed with the aloes, it becomes immediately ſo brittle, that it cannot be given in the form of a ball, wherefore I generally mix the aloes and jallap together

by the heat of the fire, and give it in a ball; and after that I give the ginger and falt of tartar in fome warm ale.

Now it frequently happens, from the ftimulating quality of the medicine, from too large a dofe, or a weak habit of body, that a flux or purging continues many days; in this cafe give him gruel, made of boiled rice and water, with fome gum Arabic diffolved therein, and repeat it; this will fheath the ftimulated bowels: and philonium romanum, repeated at intervals of time (as occafion fhall direct) will ftop the purging, to which opium may be added, if there be need.—And when he will eat corn of any fort, let him have it; or rice, either boiled or raw.—But if he refufe all food, balls fhould be given him made of the flour of beans and rice.

The

The uſual cuſtom of treating horſes, when they take phyſick, is to give them nothing to eat but hay, till the operation is over, and not to take them out on that day the phyſick is given.—— But thinking I could find a method preferable to this on ſome occaſions, I have often ventured to deviate from this good old cuſtom, by giving the horſe what corn he would eat, and by walking him out on the day he takes phyſick, but the next day, when it works, he does not go out at all, nor is allowed corn till the evening—and the only bad effects I have ever found from it, are, that walking him out the firſt day creates an appetite, that by filling his belly, he is leſs weakened, his blood is leſs impoveriſhed — he recovers his ſtrength much ſooner, ſo that he will be able to hunt again in a ſhort time, or to run his match, if he has any ſuch depend-

depending.—Yet it muſt be confeſſed, there is one misfortune attends the horſe in this way of purging, more than in the common one, which is, that he is hardly ever ſick with it. — But a greater misfortune than this is, —that the generality of grooms and farriers hardly ever think a horſe is benefited by phyſick, unleſs it makes him very ill, and reduces him almoſt to the degree of a dog-horſe.—In this caſe the medicine I give him is compoſed of ſoap and aloes, which acts as a diuretick as well as a laxative, and is a medicine of much efficacy on many occaſions.

And here occurs to me another good cuſtom amongſt the grooms, when they intend to purge their horſes — and that is, to give them a ſweat by way of ſtirring the humours (as they call it) the day before the phyſick is given ;

given ; but for my own part, I am ſo unhappy as to be of a quite contrary opinion in this matter, believing the horſe ſhould rather be kept cool and quiet for a few days before he takes it —for that this exerciſe certainly produces ſome degree of inflammation in the blood, which is very likely to be the cauſe of ſwellings in the extreme parts, if phyſick be given immediately after it—and which I am ſure has often been the conſequence of it, tho' imputed by grooms and farriers to foulneſs, —a term of art, which they beſt underſtand the meaning of.

Again, when horſes have cold ædematous ſwellings in the extreme parts, occaſioned by the impoveriſhed ſtate of the blood and juices, or bad uſage, the cuſtom is to purge away, doſe after doſe, without knowing, that by ſuch continued purging, they are doing

ing harm ; for the uſe of purges will render the blood and juices thinner, ſo that theſe ſwellings will be increaſed rather than removed, unleſs ſome proper warm medicines are given between whiles, to amend the ſtate of the blood.

When a horſe is taken with a dyſentery or ſcowering, to treat him firſt with medicines of an aſtringent quality is highly improper, but the cauſe of the diſeaſe ſhould be firſt endeavoured to be removed, by giving him toaſted rhubarb and nutmeg, — and when this may have been ſuppoſed to operate, opium is the moſt effectual remedy, of which ten or twenty grains may be given at a time, and repeated as there is occaſion ; and becauſe the inteſtines are in this caſe ſtrongly irritated, and their mucus carried off, his proper drink will be gruel made with bean

bean flour, and ſome gum Arabick diſſolved therein, his food ſhould conſiſt of rice and bean flour, and a ſmall quantity of meat broth, without ſalt, thrown into the gut by way of clyſter, would help to allay the irritation or ſtimulus of the ſame.

Worms will be cured by prepared mercury given in ſmall quantities, by pewter, tin and oil; and I have been of opinion, that Botts too would be cured by the ſame means, but later experience proves the contrary.

It is worth remarking, that bitters can be no antidote to botts, becauſe they have been often found alive in the duodenum, into which the bilious juice or gall is immediately diſcharged, than which nothing is more bitter. — Can bitters then have any better effects on worms, than on Botts, if they

 are

are there found alive too ?—It appears from experiments alſo, that worms put into the ſtrongeſt bitters, live as long, as they do in common water.

But having lately had an opportunity of opening a horſe that died in convulſions, who was known to have been troubled with Botts, and who had, in order to be cured of them, taken a conſiderable quantity of all theſe medicines for a conſiderable time before, I found a great number of them in the ſtomach, which was in ſome parts nearly eaten through, and the inteſtines were in ſome places eaten quite through.

M. *De Reamur*, in his hiſtory of inſects, has made ſome curious obſervations on this ſubject of Botts in horſes——He begins with ſaying,—

‘ Amongſt

‘ Amongſt the animals that are uſe-
‘ ful to mankind, the horſe is certain-
‘ ly entitled to the firſt rank, and yet
‘ this animal, conſiderable as it is,
‘ and contrived by its figure and beau-
‘ tiful proportion to afford us plea-
‘ ſure, was not given to mankind
‘ alone, —— there is a ſpecies of fly,
‘ whoſe right in this creature may be
‘ looked upon as ſtill better founded
‘ than our own.—

Now if this ſhould happen to be true, what a mortifying circumſtance, and ſtumbling-block of offence, it will be to thoſe unphiloſophical people, whom pride and cuſtom have taught to believe, that all things were made for man alone.—He goes on to ſay,

‘ If the horſe be uſeful to us, he is
‘ abſolutely neceſſary to the fly —the

‘ ſame Being that formed the horſe,
‘ formed alſo this fly, which depends
‘ wholly on the horſe for its preſer-
‘ vation and continuance. The flies
‘ we are ſpeaking of, like thoſe of all
‘ the other ſpecies, receive their firſt
‘ life and growth in the form of
‘ worms,—but theſe are worms that
‘ can be produced and nouriſhed only
‘ in the inteſtines of a horſe. — It
‘ is there alone they can enjoy the
‘ proper temperature of heat, and
‘ receive the nouriſhment neceſſary for
‘ them.

‘ Beſides the long, and ſometimes
‘ very long worms which have been
‘ obſerved in the bodies of horſes, there
‘ have been ſeen alſo ſhort ones.—

(By theſe are to be underſtood what we call Botts.)

‘ All

‘ All Authors, both ancient and
‘ modern, who have treated of the
‘ diſeaſes of horſes, have taken notice
‘ of theſe ſhort worms,—but M. *Val-*
‘ *liſnieri* is, I believe, the firſt who
‘ has traced them to the laſt ſtage of
‘ their transformation, and has ſeen
‘ them change into a hairy kind of fly,
‘ like the drone.

‘ The flies from which theſe Botts
‘ are produced inhabit the country,
‘ and do not come near houſes, at leaſt
‘ not near thoſe of great towns; and
‘ therefore horſes are never liable to
‘ have theſe ſhort worms (i. e. *Botts*)
‘ in their bodies; if they have been
‘ kept in the houſe, eſpecially in a
‘ town, during the ſummer and au-
‘ tumn.

‘ It

‘ It is in the former of theſe ſea-
‘ ſons, and perhaps too in the begin-
‘ ning of the latter, that the females
‘ of theſe flies apply themſelves to the
‘ anus of horſes, and endeavour to
‘ gain admittance, in order there to
‘ depoſit their eggs, or perhaps their
‘ worms.

‘ The preciſe inſtant of their en-
‘ trance will ſcarce admit of an eye-
‘ witneſs, but by the meereſt chance;
‘ yet *M. Valliſnieri* ſays, that Dr.
‘ *Gaſpari* had attained this very un-
‘ common ſight. — The doctor (he
‘ tells you) was one day looking at his
‘ mares in the field, and from being
‘ very quiet he obſerved, that of a ſud-
‘ den they became very reſtleſs, and ran
‘ about in great agitation, prancing,
‘ plunging, and kicking, with violent
‘ motions of their tails. He concluded,

‘ that

‘ that theſe extraordinary effects were
‘ produced by ſome fly buzzing about
‘ them, and endeavouring to ſettle
‘ upon the anus of one of them; but
‘ the fly not being able to ſucceed, he
‘ obſerved it to go off with leſs noiſe
‘ than before, towards a mare that
‘ was feeding at a diſtance from the
‘ reſt; and now the fly taking a more
‘ effectual method to obtain its deſign,
‘ paſſed under the tail of the mare,
‘ and ſo made its way to the anus.

‘ Here at firſt it occaſioned only an
‘ itching, by which the inteſtine was
‘ protruded with an encreaſed aperture
‘ of the anus; the fly taking the ad-
‘ vantage of this penetrated further,
‘ and ſecured itſelf in the folds of the
‘ inteſtine;—this effected, it was in
‘ a ſituation proper for laying its eggs.
‘ Soon after this the mare became very
‘ violent, running about, prancing,

‘ and

‘ and kicking, and throwing herſelf
‘ on the ground; in ſhort was not
‘ quiet, nor returned to feeding, till
‘ after a quarter of an hour.

‘ The fly then we ſee can find
‘ means of depoſiting its eggs, or per-
‘ haps its worms (i. e. *Botts*) in the
‘ fundament of the horſe, which, once
‘ effected, it has done all that is ne-
‘ ceſſary for them.

‘ If theſe worms (i. e. *Botts*) are
‘ not hatched when firſt depoſited in
‘ the horſe, but are then only eggs,
‘ it will not be long before it happens,
‘ from the nutritive heat they there re-
‘ ceive.

‘ Theſe (*Botts*) worms, ſoon make
‘ their way into the inteſtines of the
‘ horſe; they occupy ſuch parts of
‘ this region, as are to them moſt con-
‘ venient;

‘ venient, and ſometimes (as we ſhall
‘ ſee preſently) they penetrate even to
‘ the ſtomach :—All the hazard they
‘ appear to be expoſed to is, that of
‘ being carried away from the places
‘ they have fixed on by the excrement,
‘ which may ſeem likely to drive all
‘ before it —But nature has provided
‘ for all things, and when we ſhall
‘ have further deſcribed theſe *(Bott)*
‘ worms, it will be ſeen that they are
‘ able to maintain their ſituation, and
‘ to remain in the body of the horſe
‘ as long as they pleaſe.

‘ There is a time when theſe *(Bott)*
‘ worms are of themſelves deſirous to
‘ leave this their habitation, it being
‘ no longer convenient to them after
‘ the purpoſes of their growth are an-
‘ ſwered. Their transformation to a
‘ fly muſt be performed out of the
‘ horſe’s body, and accordingly, when

‘ the time of their transformation
‘ draws near, they approach towards
‘ the anus of the horſe, and then leave
‘ him of their own accord, or with
‘ the excrement, with which they
‘ then ſuffer themſelves to be carried
‘ along.

‘ The figure of theſe *(Bott)* worms
‘ affords at firſt ſight nothing remark-
‘ able, but they appear like many o-
‘ ther worms of the firſt claſs, to
‘ which they belong, that change in-
‘ to flies with two wings, and like the
‘ greateſt part of the worms of that
‘ claſs, they are provided with a ſort of
‘ ſcaly claws, with which they draw
‘ themſelves forward.

‘ There is a difference in colour ob-
‘ ſervable between thoſe that are taken
‘ by force from the inteſtine of the
‘ horſe, and thoſe which come away
‘ of

' of their own accord ; ſome are green-
' iſh, ſome yellowiſh, and others near-
' ly brown ; theſe laſt are neareſt, and
' the greeniſh ones the fartheſt from
' the time of their transformation.

' If M. *Valliſnieri* and myſelf have
' rightly obſerved the poſition of their
' claws, ſome of them differ from each
' other in this reſpect, but are perfectly
' ſimilar in every other particular, and
' which change into flies ſo nearly a-
' like, that I am convinced, they are
' of the ſame kind and origin.

' However this be, the *(Bott)*
' worms, which are the ſubject of our
' preſent purſuit, have two unequal
' claws ; and ſince I have been ac-
' quainted with the nature and uſe of
' them, I have had no difficulty to
' conceive, how they may ſtill remain
' in the inteſtines of the horſe, in op-

'position to all efforts of the excre-
'ment to force them out — one of
'which, that I was handling and exa-
'mining, faſtened upon my finger in
'ſuch a manner, that I found great
'difficulty to diſengage myſelf. Theſe
'claws are a ſort of anchor, differently
'indeed diſpoſed from thoſe of com-
'mon anchors, but contrived to pro-
'duce the ſame effect.

'Beſides theſe two claws, nature
'hath given to each of theſe (*Bott*)
'worms a very great number of tri-
'angular ſpines or briſtles, very ſuffi-
'cient to arm them againſt the coats
'of the inteſtines, and to reſiſt the
'force employed to drive them to-
'wards the anus, provided the head
'be directed towards the ſtomach of
'the horſe.

'It

'It will be aſked, no doubt, if 'theſe (*Bott*) worms are not dange- 'rous to horſes? — The mares which 'afforded me, for ſeveral years, thoſe on 'which I made my obſervations, did 'not appear to be leſs in health, than 'thoſe which had none;—but it may 'ſometimes happen, that they are in 'ſo great a quantity in the body of the 'horſe, as to prove fatal to him. — 'M. *Valliſnieri* ſuppoſes theſe (*Bott*) 'worms, to have been the cauſe of 'an epidemical diſeaſe, that deſtroyed 'a great many horſes about *Verona* 'and *Mantua* in the year 1713—the 'obſervations communicated to him 'by Dr. *Gaſpari* ſufficiently confirm 'his ſuppoſition.

'This gentleman, upon diſſecting 'ſome horſes that died of this diſtem- 'per, found in their ſtomachs a fur- 'priſing

‘ prifing quantity of fhort worms, of
‘ which, to give us fome idea, he
‘ compares them to the kernels of a
‘ pomegranate opened—each of thefe,
‘ by gnawing on the coat of the fto-
‘ mach, had made for itfelf a kind
‘ of cellule therein—each of thefe ca-
‘ vities would eafily contain a grain of
‘ *Indian* wheat.

‘ It is eafy to imagine by this means
‘ the ftomach muft be reduced to a
‘ wretched condition, the outer mem-
‘ branes were inflamed, and the inner
‘ ones ulcerated and corrupted; a very
‘ fmall quantity of thefe worms were
‘ found in the fmall inteftines, and only
‘ a few in the larger, to which laft they
‘ were found affixed, but had not
‘ corroded them.

‘ It is only perhaps when thefe
‘ (*Bots*) worms are in great numbers,
‘ and

'and thereby incommode each other
'in the inteſtines of the horſe, that
'they make their way towards the
'ſtomach—and indeed a very few
'flies muſt be enough to overſtock the
'inſide of a horſe, provided, they
'ſhould depoſit all their eggs, and ſuch
'ſhould all be animated, M. *Valliſni-*
'*eri* having counted ſeven hundred and
'odd in the body of one ſingle fly.

'When one of theſe Botts has left the
'anus of the horſe, it falls on the
'ground, and immediately ſeeks out
'for ſome place of ſafety, where it
'may retire, to prepare for the laſt
'ſtage of its transformation, by which
'it is to become a fly.

'And now by degrees the ſkin har-
'dens, and thickens, and at length
'forms a ſolid ſhell or cod, the form
'of

' of which ſcarce differs from that of
' the worm.

' It is firſt of a pale red colour,
' which changes into cheſnut, and at
' length, by the addition of gradual
' and ſucceſſive ſhades of brown, the
' ſhell is rendered black.

' The worm or Bott before it paſſes
' into a nymph is of the form of an ob-
' long ball; it remains in this form much
' longer than worms of the fleſh fly
' kind.—I have met with worms, that
' retained this figure five or ſix days
' —as yet one can perceive no traces
' of the legs, wings, and head of the
' nymph.—Hence I firſt learned, that
' theſe *(Bott)* worms do not become
' nymphs immediately upon their firſt
' change, but that, in order to become
' flies, they muſt undergo one change

' more

‘ more than caterpillars ordinarily do
‘ to become butterflies.’

This is an abſtract only of what *Reaumur* has related in one of his memoirs, to whom the curious reader is referred for a more ample account of this matter.

This doctrine, and our own obſervation, will teach us ſome truths worth knowing.—Firſt, that horſes may occaſionally die with ſpaſms, and convulſions, when theſe botts lodge in the ſtomach and inteſtines, and corrode the ſame, inſtead of coming away by the anus. Secondly, that no medicines ought to be eſteemed a remedy for the botts, till we ſee them brought away dead by their effects; and therefore, if they did not generally make their eſcape by ſome law unknown to us,

horſes would die much more frequently than they do with theſe inſects.

Now I'll ſhew you how to cure them.

Take of new milk one quart, honey half a pound, give the horſe this in a morning, let him faſt after it an hour and a half, then give him a pint of ſtrong brine, more or leſs, according to the ſize and ſtrength of your horſe, faſting after that, another hour; repeat this three or four ſucceſſive mornings; this deſtroys them, and leaves no appearance but of their ſkins, or ſhells, which are brought away with the excrement—and this will kill worms of all ſorts and ſizes.

The farcy ariſes from vitiated blood, and when catched, as it may be by licking the matter from other horſes, the ſame effect will be produced.

When

When the ſkin breaks, and buds of ſprouting fungous fleſh appear on any part, ſuch are to be touched with a rag dipped in corroſive ſpirit of ſalt, ſtrong ſpirit of nitre, aqua fortis, or any ſuch kind of medicine.

When ſwellings fall on any part, which is no uncommon ſymptom in this diſorder, a poultice made with the emollient fomentation thickened with oatmeal, is to be applied thereto twice a day.

With reſpect to malenders, ſwelled legs, ſcratches, ſcurfy heels, what is called the greaſe, and ſuch like diſorders; theſe all proceed from a languid and obſtructed circulation, whence enſues a coldneſs in the extreme parts.—The remedy for theſe, is warm fomentations applied to the parts; good rub-

bing of the limbs is neceſſary, and a poultice compoſed of rye-meal, and milk, is a proper application to ſore heels; all unctious things doing more harm than good. The habit of body is to be altered, for which purpoſe the medicines, that are moſt proper to be taken internally for all theſe diſorders, ſhall be ſpoken of by and by.

Now the virtues of ſalt or ſea-water are in theſe caſes very remarkable, for having occaſionally lived near the ſea-ſide, I could not help obſerving the effects of it. It is a cuſtom at *Margate*, in *Kent*, when people bathe, to be drawn a little diſtance into the ſea, in a machine with one horſe, who by a conſtant ſucceſſion remains in the ſea perhaps every day of his life, for four, or five or ſix hours together, and whatſoever ulcers or cutaneous diſorders the horſe may chance to have, he is by

ſuch

ſuch practice continued for a time ſure to be cured of, I mean in ſuch parts as the water can reach.

And the virtues of ſalt water would, I believe, extend farther than are yet known, if they were under proper conſideration—inſtance, in the caſe of people being bit by mad dogs, that are ſent to ſea to be dipped, ſome are cured, ſome are not—and I believe it is owing to this cauſe, that they are not all cured — namely, that it does not operate alike on all men, for ſome who can ſwim well, having no fear of drowning, tho' perhaps damnably ſouſed by the dippers, receive none of this water into their ſtomach—others that cannot ſwim, what between the fear of being drowned, and gaping for breath, do often imbibe a great quantity of this water, and are hereby ſtrongly operated upon both upwards

and

and downwards; and in theſe operations, I think, conſiſt the virtue and effects of ſea-water, as an antidote to madneſs, and not in the act of bathing—and what confirms me in this opinion, is, that if one dog be bit by another, in ever ſo ſevere a manner, even in the head, which is thought incurable, ſuch dog, by often taking turpeth mineral, that operates upon him upwards or downwards, or either way, will I venture to ſay be moſt certainly cured, at leaſt I have always found it ſo—and this effect, I think, is brought about by the actions of theſe medicines, and not by any ſpecifick quality, either of the ſalt or the mercury—for there is no medicine in the world, that can properly be ſaid to contain any ſpecifick quality, but when we know not how to account for the effects or modes of operation in any medicine, we, to keep up the ſhew of knowledge,

knowledge, and to gratify our own pride, have recourſe to hard words, or terms of art, that ſerve in reality to betray our ignorance. —But ſea-water has by no means an equal chance in this reſpect with other phyſical remedies, for in theſe laſt you perſiſt for a time, and go through a long courſe or regimen; whereas, in the other caſe, you are dipped once, and gone about your buſineſs.—But if there be any virtue in ſea-water, that may be an antidote to the bite of a mad dog—as undoubtedly there appears to be from many inſtances, why not ſtay and make ſure of it, by continuing to bathe, and to drink alſo for a length of time.

And with reſpect to the medical uſe of ſalt, it may perhaps be of as much ſervice to mankind in many diſorders, as it is to the brute creation; reſpect being

being had to the difference thereof, for the ſake of conſtitution.

For in ſcrophulous and ſcorbutic complaints, gravel, cholicky Pains, proceeding from heated bowels, in fevers, inflammatory diſorders of all kinds, bilious obſtructions, rheumatic complaints, in intervals of the gout, and many other chronical diſorders, it will be found a medicine of great efficacy, if continued to be taken for a time.—But the misfortune of all medicines, intended as alteratives, is, that the patient expects to be cured in a few weeks, of a diſorder he has been treaſuring up for many years, and perhaps continues daily to do the ſame.

To cleanſe the ſtomach from ſlimy viſcid juices, ſalt will be found a proper remedy, as may be gathered from the uſe of ſea-water; which, if taken too

too freely, will operate not only on the ſtomach, but on the coats of the inteſtines alſo, in ſuch a manner, as greatly to diſcharge their mucus, and produce violent bloody fluxes, various inſtances of which have been known.

Now food and climate I take to be the origin of all diſeaſe; — by which two things, the bile or gall is more immediately and primarily affected in all countries, and in all conſtitutions. From which laſt ſource the generality of chronical diſorders, and ſome acute ones are alſo derived.

The uſe of this bile is to complete the digeſtion by aſſimulating the food, and rendering its juices fit to enter the lacteal veſſels.—It is the ſoap, or menſtruum of the body. — The fountain and origin of all other ſecretions (on

the regularity of which health depends) without which (Bile) every animal on the earth would ſoon fall into a ſtate of putrefaction.

Hence I have been led to think, that what we call real diſeaſes, how-ſoever diſtinguiſhed by their various names and ſymptoms, are, perhaps, no more in general, than ſecondary effects, produced by the ſtate and nature of the bile, and the ſecretion thereof.

In colder climates, or inactive life, this bilious juice is more ſparingly ſecreted; hence the various kinds or loads of aliment impoſed on the ſtomach, not being duly aſſimulated, either from the quantity or quality of this juice, other ſubordinate ſecretions, depending on this proper one of the bile, will not be regularly, or truly promoted.

Hence

Hence obſtructions will arife of various kinds, and different men will be variouſly affected, according to the different organiſm of their bodily ſyſtem.

And what we call hereditary diſeaſe, depends altogether (as I conceive) on the particular frame and texture of theſe bodily organs, and is not any real latent diſorder, as it is generally underſtood, or, as Mr. *Pope* ſays,

The young diſeaſe, that muſt ſubdue at length,

But from a ſimilar cauſe, or habit of body in the parent and the offspring, ſimilar effects are occaſionally produced — and this doctrine will be more fully explained by obſerving, that one ſon ſhall be afflicted with the ſame diſeaſe his father had; and yet another, tho' perhaps not ſo moderate a

liver, ſhall eſcape this diſeaſe, by being conſtituted like the mother.

To this it may be objected, that many people, who were always very abſtemious livers, have been, even from their younger days, afflicted with the very ſame diſeaſe their fathers had, and therefore ſuch diſeaſe is real and ſelf-exiſtent. To which I anſwer, that the effect of climate, as well as of food, will bring on particular diſeaſes, on perſons particularly conſtituted; — for inſtance, many people afflicted with the gout, ſcurvy, rheumatiſm, and ſo forth, in one climate, ſhall, by living in another, entirely loſe ſuch complaints.

Again, in ſome of the eaſtern countries many people, particularly thoſe of a corpulent habit of body, not circumciſed, are very ſubject to ulcers under

under the foreſkin of the penis, which in time, for want of due care and cleanlineſs, become virulent and infectious.—Hence we may learn, that ſome diſeaſes derive their origin from climate alone, and that the inſtitution of circumciſion in ſuch countries for any ſociety of people, who intended to keep themſelves clean and free from infection, was a very wiſe one, whether it was ordained by divine or human authority, tho' moſt likely to be obſerved, when propagated as a religious law.

Now in all diſeaſes ariſing from obſtruction, ſalt will be found a good medicine.

In hotter climates, diſeaſes in general ariſe from too copious a ſecretion of this bilious juice. — In theſe circumſtances it is probable, the uſe of

ſalts

falts would prove detrimental.—And I have been told by a very judicious furgeon, who was ſome years in the *Eaſt Indies*, and who was alſo fond of giving nitre in fevers, from the ſucceſs he had occaſionally obſerved attending it, that this medicine, given in fevers peculiar to that country, was, according to his obſervation, very deſtructive; and that, by its promoting ſtill greater ſecretions of the bile, immoderate fluxes were produced, which generally ended in death.

Perhaps alſo the different complexions of mankind, inhabiting the various parts of this terreſtrial world, depend alone on the ſecretion of this bilious juice.—The colour of a black ariſing from nothing elſe than a kind of mucus, which is retained between the ſkin and the cuticle; the fibres of the ſkin being white in all men.

How

How abſurdly then do ſuch people argue, who maintain, that there are two ſorts of men created by the Almighty, one deſtined to ſlavery, the other to wealth and power. The effect alone of arts and arms.

CHAP. III.

Againſt any innate qualities in horſes, which the ſportſmen call blood.

NOW my opinion is, that the origin of all men, as well as of all animals of the ſame ſpecies, was the ſame in the beginning of time, and that it is climate chiefly which produces the difference we perceive in them.

Amongſt the horſes produced in different countries, we may perceive a great

great difference in their performance, and I think in their figure alſo; and this difference of performance has generally been imputed to a term called blood, which the ſportſmen ſay is a certain innate or præternatural virtue, peculiarly belonging to ſome horſes, and not to others; and it being a proverb amongſt them, that all ſhapes run, they would be underſtood to mean, and do on ſome occaſions aſſert, with the firmeſt belief, that this virtue or excellence is quite independent of matter, and of the formation of parts, and then of courſe it muſt be altogether undiſtinguiſhable to the eye—and whenever I ſhall have occaſion to mention the word blood, I would have it underſtood as ſomething independent of form and matter, juſt in this ſame light as they always uſe it.

But

But my opinion herein differing from the generality of mankind, I did once ſet down my thoughts on this ſubject, in a ſmall eſſay, called, *A diſſertation on the breed of horſes*, to which many objections having been made, I have taken this opportunity of making ſome reply to them, hoping to ſet this matter in ſomewhat a clearer light, in which my only deſign is, to have our breed of horſes improved.

It has been objected, that this diſſertation before-mentioned tends only to prove, that all horſes of a fine ſhape will make good racers, let their breed or ſort be what it will; to which I can only anſwer, that I am very ſorry, I ſhould have expreſſed myſelf ſo ill, as to give riſe to ſuch an opinion, for whatever ſome readers may have conceived from the doctrine therein ad-

vanced, my meaning has been very different.

And it has not only been far from my design to advance any such maxim, but I think I have, as plain as words can set forth my meaning, said the contrary in various parts of that essay, particularly in page 8, 10, 11, 12, 13, 14, 44, 45, 46, 47, 48. — But how unhappily soever I have expressed myself in that essay, my design was to shew, that the swiftness, and the ability of perseverance, we find belonging to some of these *Arabian* horses, and their descendants, depended alone on their particular formation and elegance of parts, &c. which being as I thought visible to the eye, I did conclude the excellence of all horses to be merely mechanical.

To

To this it is objected, that the formation of parts can have nothing to do with the action of horſes, we call bred ones, becauſe mankind has not agreed what this particular formation in race-horſes ſhould be. — It is very true, they have not; — nor have they agreed about any one thing whatſoever, that I know of. But the agreement or diſagreement of mens opinions will neither add to, nor detract from the real exiſtence or truth of things; nor would it any ways alter their nature, even tho' the philoſophy of the ſcepticks ſhould become univerſal.

What this particular formation neceſſary to the being of a perfect race-horſe is (for ſuch I am talking about) has been partly ſhewn in that eſſay before publiſhed, but that not being

of ſufficient force to carry conviction along with it, I ſhall here attempt to explain the matter a little farther, merely for my own ſatisfaction, not thinking, that any thing I can advance, will influence the minds of ſome men, few being willing to relinquiſh their old opinions, or to ſubſcribe to a doctrine, which they themſelves have not diſcovered, or cannot account for by their own diſcernment—and that people in the racing-way ſhould never have diſcovered a peculiar elegance, and different formation in ſome horſes, is not to be wondered at, ſuch having ever employed their thoughts and attention to the blood only,—being fully perſuaded, time out of mind, that the excellence of horſes conſiſted in that alone.

The formation then, which I conceive neceſſary to conſtitute a capital

and

and perfect race-horſe, does not relate only to the proportion and ſymetry of the whole, which ſome men ſay is the doctrine I have advanced, tho' it be a neceſſary ingredient to perſeverance or bottom, and is a *ſine qua non*, but it extends alſo to the limbs and joints, by which his motions are performed, and to a particular manner of their being ſet on—And this formation has been in part explained in the eſſay before-mentioned, where the neceſſity of length is ſhewn, and that beſides a general length in the horſe, there is or ſhould be a certain propriety of length determined to ſome particular parts.

For inſtance, the race-horſe ſhould be broad, deep, and have a great declivity in his ſhoulders, his quarters ſhould be long and ſtrait, his thighs ſhould be let down very low, his hock ſhould ſtand far behind, and from him,

him, thence downwards to the next joint he ſhould be very ſhort, which part of the leg ſhould not be ſtrait, but ſtand under him, like an oſtrich's leg, with a long lax bending paſtern; and theſe I think are in part the ſprings of action.

Now I ſhould be glad to be informed, whether the remarkable ſpeed that oſtriches are ſaid to have, any way depends on this formation, and ſetting on of their limbs, or on the ſame innate virtue, called blood, as the action of horſes is ſaid to depend on.

And theſe are not the only requiſites neceſſary to the formation of a perfect race-horſe, there being as much difference, and as great a nicety requir-ed in the manner of ſetting on a horſe's arm, which ſhould be at the extreme point of the ſhoulder, as in any part be-

belonging to him, and which contributes to the act of extenſion, as well as the declivity in the ſhoulders :— nor is one horſe in fifty properly formed at the knee for racing ; nor does one in a hundred of any ſort bear a true proportion from the knee to the fetlock-joint, tho' it be very material with reſpect to every action he is to perform.—Yet moſt or all of theſe things have paſſed unobſerved by the generality of ſportſmen—Not that I think it at all concluſive, that either the maſter or the ſervant ſhould be obliged to underſtand the true properties, or even the formation neceſſary to make a race-horſe, becauſe one has the care and management of his food and exerciſe, and the other has the pleaſure of ſeeing him twice a year, and paying the expence.

By

By the true poſition of theſe joints and limbs, the horſe is obliged to ſtand over more ground than one that is otherwiſe formed, even tho' the length of body be the ſame in both, and by deſcribing ſo much a greater circle, he is enabled, when he extends himſelf to go on, to make a greater acquiſition or purchaſe of ground, than the horſe who ſtands in a more upright poſition, even tho' the latter be the longeſt of the two.

The proper formation of ſome of the outward acting parts (or at leaſt what I think ſo) having been deſcribed, let us now conſider, what elſe is wanting to make a perfect race-horſe: — why, a general proportion, length, muſcular ſubſtance, and a certain elegance of texture, and of the conſtituent parts of the whole; the nature

of

of which (elegance) or what I mean by it, ſhall be explained by and by.

Now ſuppoſing the condition of horſes to be always alike, they will always excel each other according to the particular elegance and formation of theſe acting parts, degrees of proportion, of length, and of muſcular ſubſtance, the want or the poſſeſſion of either of which, will not only produce their effect in all horſes, but a difference alſo in the very ſame horſes tried together on different kinds of ground; —and this I think cannot be otherwiſe —for if a different formation of the parts, &c. and degrees thereof be not the cauſe of different performance in horſes, why then one of theſe horſes of the right and true blood would act alike on all ground, and be juſt as good, tho' he was made like a hog, or without joints, unleſs ſome other cauſe of action

in horſes can be ſhewn, beſides this virtue of the blood, or the formation of the parts, &c.—And this argument alone would, I think, be ſufficient to evince the truth of my doctrine, if there was no other to be found in ſupport of it.

And the difference in theſe requiſites before-named will alſo account for the reaſons, why ſome very plain horſes, that are not well made to pleaſe the eye, and ſo are called ill-ſhaped ones, ſhall by means of a greater length and depth, and a peculiar manner of ſetting on theſe acting parts, excel others, who, with the ſame elegance, poſſeſs a greater ſhare of muſcular ſubſtance and proportion, a more noble and lofty forehand, and a finer figure throughout the whole.—And ſo the handſomeſt and moſt elegant horſe in the world, and of true proportion too,

too, who wants a proper declivity, length and circular extent in theſe acting parts, may be no racer at all.

Again, horſes with the ſame elegance, and a tolerable formation of theſe acting parts, ſhall be able, by a ſuperiority of muſcular ſubſtance, and a more general proportion, to excel thoſe, that have a little more length and depth in theſe acting parts; for by means of this ſubſtance and proportion, they will bear to be preſſed longer than thoſe who are deficient therein—and ſo far the good old proverb, namely, that all ſhapes run, may be allowed to be true enough.

Again, we may often ſee horſes, that can boaſt of no blood or pedigree, which we deem ill-ſhaped ones, ſurpaſſing others of a finer figure, and which we call handſome horſes.—Pray

does the performance of ſuch ugly half-bred horſes depend on the formation of the acting parts, their proper length and extent, the circle they deſcribe in their ſhape, and the peculiar manner of theſe parts being ſet on, or on any innate quality?—or why may not the man, who cannot diſcern this particularity of formation in the half-bred horſe, ſay, that his excellence depends on ſome innate quality, with as much reaſon and truth on his ſide, as the ſportſman has for attributing the excellence of ſome bred horſes, whoſe performance he cannot account for, by the eye, to this ſame innate cauſe?—when I talk of length and extent in the acting parts, I deſire not to be miſunderſtood, for no horſes legs can be too ſhort.

Now where is he, who will take upon him to ſay, that ſome men are not able

able to diſtinguiſh by the eye this difference of formation betwixt ſome horſes, as well as others can diſtinguiſh this difference betwixt ſome dogs—tho' perhaps not quite ſo readily, becauſe the human eye cannot take in at one view, the parts and proportion of a being, where one ſ̄ is ſo much larger than the other.

Whoſe eye does not inform him, that a greyhound will beat a cur dog, or that a bred horſe (as it is called) will beat a cart horſe? then why not a difference betwixt two bred horſes, for he who does not perceive, that many ſuch do differ greatly from each other, I think cannot ſee at all.

Tho' many ſorts of dogs are as long as the greyhound, every eye may ſee, that one will excel the other, and that from the curves and circles, which one de-

deſcribes in his ſhape, and which the other has in a leſs degree.

Fine greyhounds have, like fine horſes, a general proportion, a certain elegance of parts, length, and are full of muſcles, and their hocks are let down almoſt to the ground behind, and ſtand from them, and to ſupply the want of a long paſtern, their feet or toes are made longer than any other dogs that can be named.

It is this very formation ſo obvious in a greyhound, and in ſome horſes, that in part produces the effect of ſpeed; and the reaſon, why it is not ſo manifeſt to all men in both ſpecies, is, becauſe the degrees of this formation do not come ſo near together in dogs, as in horſes, that of the greyhound far excelling all others.

Now

Now the fine greyhound is remarkably broad, and expanded in the muſcles of his thighs; this I call a perfection.—And ſo I think it is in horſes, tho' it be but ſeldom ſeen. This the ſportſmen eſteem a fault, and what moves my laughter, they call it a coach quarter—So little likelihood is there of any agreement amongſt mankind about the proper formation of a race-horſe, that they have not ſo much as agreed upon the names, whereby to diſtinguiſh the different parts thereof, even tho' the muſcular expanſions ought to be very different in theſe parts, when we require a perfect horſe of any ſort.

Hares are made in the ſame manner, and they can deſcribe a greater circle, and acquire more ground at one ſtroke, than any animal that I know of, in the whole world, of their ſize and length,

length, and that becauſe their quarters are ſo long, their thighs are ſo much let down, and the lower part of their hinder legs are placed (as it were) under them, and to anſwer the purpoſe of a long paſtern, their toes are made very long.—From theſe cauſes I am inclined to think her ſprings of action are in part derived—add to this, the blade-bone of no animal runs away into her back with ſo much declivity as a hare's, and this, I think, enables her to point forward.—Again, mark the length from her elbow to the knee, and the ſhort ſpace there is betwixt that and the next joint; by this length of the arm, and the muſcles thereof, ſhe can farther extend her fore-parts—ſo it is in a greyhound, tho' not, I think, in ſo many degrees; and this formation in degree ſo far apper-tains to the horſe, that he cannot be called perfect without it, let him be

ever

ever ſo well conſtituted in all other reſpects.—But the degree of ſhortneſs in this part of the horſe is better conſidered by the proportion it bears to his other parts, than by any general rule that can be laid down.

Now it is well known, that the hare can ſtrike as far at a ſtroke as the greyhound dog, who is much longer;—tell me then, are her motions performed by the peculiar formation of the acting parts, and the ſtrength and elegance of her muſcles, or by any innate quality, and unknown virtue; or whether, from a ſimilarity in theſe points found in all animals that are particularly endowed with ſpeed, there may not be ſome reaſon to ſuppoſe, that the cauſe of it is the ſame in each?—and whether it be not highly probable, that the power who created all animals, has ordained, that the differ-

ent degrees of ſpeed in different horſes, ſhould depend on the very ſame law as the different degrees of ſpeed in different dogs, I mean the law of their conſtituent parts; even tho' you and I ſhould happen not to perceive any difference in ſuch parts.

I have often been ſurprized, and diverted too with the commendations I have heard the ſportſmen beſtow on horſes, for having large bones, becauſe I think on the contrary depends in great meaſure the excellence we find in what are called bred horſes.

If by this expreſſion ſubſtance only was to be underſtood, it would be quite agreeable to my notion, as I have ſaid before, but what conſtitutes the great difference, formation of the acting parts excepted, between the *Arabian* horſes, and all others, is, that ſome of them have, and all ſhould have, to

be

be perfect, larger muſcles or ſinews, and ſmaller bones, than any other horſes in the known world, for theſe muſcles or ſinews happen to be the ſole powers of acting in all animals, the bones being the weight to be lifted, and ſerve only to extend the parts.

Which now will act with moſt velocity, and moſt perſeverance of time, (all other parts alike) the horſe that has a large ſinew, and a ſmall ſolid bone, like ivory, or like a deer's bone, or he that has a large bone of a ſoft ſpongy kind, with a ſmaller ſinew? for the dimenſions of the leg ſhall, if you pleaſe, be the ſame in both—I ſhould think the former.

This ſolid bone with a firm ſinew, and a fine ſkin ſuper-induced, where you may ſee every vein, and can lay your finger between the bone and the

ſinew, ſhews, that the horſe has no thick fleſhy membrane intervening, which ſerves only to retard his ſpeed, and is like the bone, a dead weight, to be carried along with it, and which no way conduces to the ſtrength of the animal.

Now this is what I call elegance of parts, which is not confined to the outward texture only, but extends alſo to the internal conſtituent parts, namely, to the bones, ſinews, and membranes, which is in part explained already—and to all the ligaments of the joints—and this elegance of the conſtituent parts ſhews itſelf particularly in many horſes, where, tho' the leg ſhall have a very ſufficient ſubſtance, and bear a true proportion to the other parts of the body, yet the paſtern ſhall be very lax, as well as very ſmall, both which are very neceſſary for a perfect race-

race-horſe, length and laxneſs ſerving as ſprings for the acquiſition of ground, ſmallneſs contributing to agility, and to perſeverance or bottom.

That the ſmallneſs of the paſtern ſhall contribute to the ſhoutneſs or bottom of the horſe, you will ſay is very ſtrange, and new doctrine, it being always looked upon as a ſign of weakneſs—that I can't help—But if there was no other argument to ſupport this doctrine, examples enough of horſes ſo made, that were excellent racers, might be brought in defence of it, and I think no body will diſpute matters of fact—tho' I am not quite ſure of that.

For inſtance, *Cartouch* was a remarkable horſe, in theſe reſpects; who, tho' but a galloway, beat ſome good and ſized horſes very eaſily, all carrying eleven ſtone.

That

That horſes run well with ſhort paſterns, is no reaſon they ſhould not run better, *cæteris paribus*.

Now to explain this doctrine about the ſmallneſs of the paſtern, as it relates to bottom.

You muſt underſtand, that all the difference there is in any animal betwixt a muſcle and a ſinew, is, that the fibres of the firſt are broad and fleſhy, thoſe of the laſt are more firm, and driven into cloſer contact——By means of which the ſtrength of a ſmall ſinew becomes greater then the ſtrength of a large piece of fleſh—for inſtance now,—your leg and mine—the hinder of it is upwards at the calf a fleſhy ſubſtance, which anatomiſts have agreed to call a muſcle; lower down, towards the extremities, this is more compact,

and

and becomes tendinous or ſinewy, tho' it ſtill be the ſame body——and you find it in all actions capable of bearing its ſhare of work, without complaining, which the calves of the leg often do, after much walking, or any violent exerciſe.

I pray you now to tell me, whether you ever thought a man, who was well formed in all other reſpects, to have leſs agility, or leſs ſtrength, be-becauſe the ſmall of the leg was very delicate and ſlender? or if your leg and mine had been covered with a thick coarſe membrane, and compoſed of looſe fleſhy fibres, continued down to the extremities, inſtead of being fine and tendinous, whether you don't think, that ſuch a weight would have been againſt us, have made us leſs active, and to have tired ſooner? juſt ſo it is with the horſe—But when

the

the wiſe deſigns of nature are not fathomed by our ſhallow capacities, we arraign the ſkill of the omniſcient power, and fooliſhly preſume to cenſure his works, when they are moſt perfect.

In theſe things alone, I mean the nature and elegance of their conſtituent parts, and the formation thereof, conſiſts the difference between horſes of the ſame, and different countries, or betwixt blood, and no blood.

Now aſk the ſportſman how it happens, that ſome of theſe long paſterned horſes perform ſo notably, he has his anſwer ready, why 'tis in the blood to be ſure, or elſe theſe weak cat-legged devils could not run ſo.

The ſportſmen have a ſaying, ſuch a horſe ſhews a great deal of blood—

ſurely

ſurely they think it ſomething mechanical, and viſible to the eye, elſe they could not uſe this expreſſion, or do they pretend to diſcover, by innate knowledge, the innate virtues of the animal?—But they mean, if they mean any thing, what I do, when I ſay ſuch a horſe has a peculiar elegance in the texture of the external parts—And why the *Arabian* horſes differ from thoſe of other countries, either in the formation or elegance of their parts, is not at all material for us to know.

Now the *Arabian* horſes, of the very ſame family, as I am informed by people, that I think are very good judges, who have lived in the eaſtern countries for years together, differ as much from each other, both with reſpect to length, ſubſtance, proportion, elegance, and formation of parts, as horſes of the ſame family can do in

other countries; and how ſhould it be otherwiſe? for we plainly perceive here at home, that there often is a great difference betwixt two full brothers, of all kinds or ſpecies of animals: pray now tell me, why this ſhould not happen in *Arabia*, as well as in *England*.

For inſtance, *Conqueror* and *Othello* were two full brothers, but one was a king and the other a beggar with reſpect both to form and action.—If now the difference in the performance of theſe two brothers did not depend on their different formation of parts, &c. pray tell me, on what it did depend? for the cauſe of it could not be in the blood, unleſs you will ſay this innate quality may appertain to one brother, and not to another; and then I am afraid the by-ſtanders will ſay, you have proved it to be plainly nothing.

A hundred examples of the ſame kind, and that almoſt in every family amongſt our racing-horſes, might be brought to ſhew, that two equal brothers are hardly ever produced, and when a difference does happen, it will be juſt the ſame thing in its conſequences (if the formation of parts, &c. be at all concerned in action) whether it happen to an *Arabian* horſe, or any other.

Why this difference ſhould be betwixt two full brothers is not at all material for us to know; it is ſufficient for my purpoſe that it does happen—It may ariſe perhaps from a diſſimilitude of parts in the horſe and mare, or from a ſimilitude of ſome parts tending to ſome extreme in both; it may ariſe alſo from ſome violence or impreſſion on the womb, whilſt the fœtus is in a

ſoft ſtate, or from ſome defect of conſtitution in the mare, or the ſeed of the horſe.

Theſe reaſons, and the inſtance before-mentioned between *Othello* and *Conqueror*, beſides others which might be quoted, will ſerve to ſhew, that the laws of nature are not always certain, even when the horſe and mare are put together with the utmoſt propriety and perfection, which I believe ſeldom happens here, the formation of the parts of either being hardly ever thought of amongſt the breeders of running-horſes. And hence I ſuppoſe it will be allowed, that the ſame effects may be produced in all countries; and that the *Arabian* horſes of the ſame family may differ from each other, as well as thoſe of other countries; and that in as many degrees—Yet when we have the happineſs to obtain one of

theſe

theſe mean caſt off *Arabians*, for I think few others fall to our ſhare, after we have bred from him ſome years, and find his colts deficient, we cry out he is not of the right or true blood, —*riſum teneatis?* ſuch ſkill have we in horſes, and ſuch are our ways of reaſoning.

If I could have a horſe formed in the manner, and with all the advantages I have here named, I ſhould be proud to uſe him as a ſtallion, was I a breeder, without making any enquiry after his family or country—But ſhall the brother of this horſe, becauſe he is brought from the mountains of *Arabia*, and of the very beſt reputed high blood (as it is called) who is deficient in all or moſt of theſe reſpects, (no matter from what cauſe) induce me to breed from him, for the ſake of his family and his country? — and that

a great

a great difference does occaſionally happen in the ſame, and in every family of horſes, I ſuppoſe no man will deny.

But it is ſaid—that the virtue of the blood in him that was no racer, may produce a racing ſon—yes—ſo it may, when the ſon has happened to acquire a formation of parts, &c. different from the fathers, by the help of his mother—there indeed an ill-formed horſe, that could not run himſelf, may beget a better racer than himſelf, by the aſſiſtance of better parts derived from, and ſimilar to thoſe of the dam—if it be otherwiſe, it does not ſignify at all, how the father, ſon or mother ſhall be formed, whether like a horſe, or an aſs, a wild boar, or a ſea fiſh, ſo that they are of the right blood.

And

And here we may obſerve, how different the opinion amongſt our ſportſmen, of breeding from a horſe, who was no racer, for the ſake of his country or family, is, to that of *Virgil*, who, ſpeaking of a proper ſtallion, ſays thus,

Æque—magiſtri
Exquirunt, calidumque animis et curſibus acrem,
Quamvis, &c.—
Et patriam epirum referat, forteſque mycenas,
Neptunique ipſâ deducat origine gentem—

Which, I think, in plain *Engliſh*, is to ſay——

Your good judges of breeding require a ſtallion, that is a good runner himſelf, as well as of true courage, or elſe the country he is brought from is of little conſequence, nor even his lineage, although he derives it from the immortal gods.

Stop

a great difference does occaſionally happen in the ſame, and in every family of horſes, I ſuppoſe no man will deny.

But it is ſaid—that the virtue of the blood in him that was no racer, may produce a racing ſon—yes—ſo it may, when the ſon has happened to acquire a formation of parts, &c. different from the fathers, by the help of his mother—there indeed an ill-formed horſe, that could not run himſelf, may beget a better racer than himſelf, by the aſſiſtance of better parts derived from, and ſimilar to thoſe of the dam—if it be otherwiſe, it does not ſignify at all, how the father, ſon or mother ſhall be formed, whether like a horſe, or an aſs, a wild boar, or a ſea fiſh, ſo that they are of the right blood.

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Stop

Stop here, for a moment, gentle reader, and reflect with yourſelf into what a number of abſurdities, with reſpect to the ways and wiſdom of providence, into how unbounded a maze of errors, with reſpect to our own knowledge of the nature and uſe of earthly beings, —— into what a ſeries of miraculous events alſo, with reſpect to their actions, this ſuppoſed innate quality in animals will lead us, conſidered as productive of action, when we may know, that providence has given to all of them proper parts, by means of which they can and muſt perform all their different motions and functions of life, and which do anſwer every purpoſe he deſigned them for, whether it be to run, crawl, ſwim or fly—But if on the contrary the action of animals does not depend on the conſtituent parts to them appropriated,

why

why then that line of *Horace*, which juſt now occurs to me,

Delphinum ſylvis appingit, fluctibus aprum,

(tho' applied by the poet to another purpoſe) contains nothing in the picture, abſurd, erroneous, or ſtrange.

It is owing to this opinion of the virtue of the blood, and what the ſportſmen call a proper croſs, and an entire inattention to, and want of knowledge amongſt the breeders, of the laws of nature, and the proper formation of parts, *&c.* neceſſary to make a race-horſe, that ſo very few good ones are to be found in this kingdom; and if all our horſes and mares of the racing kind were turned looſe together in one place, I dare ſay, their offspring, with the ſame food and care, would be full as good, if not better, than any we now breed by in our ſkill in pedigrees, and proper croſſes.

Is it not a truth to be ſeen every day, that the very beſt reputed bred horſes and mares in the kingdom cannot run at all ?—yet ſtill they ſerve to breed from for the ſake of the blood, or the croſs. — Hence it is, that the breed of horſes in this kingdom, is little ſuperior to a parcel of hackneys, in compariſon of what they might be, if well underſtood—and I think there are few of either (at leaſt that I have ſeen) from whom a man of any tolerable judgment in horſes, can expect to breed a good racer.—As to the mares in general, we ſeldom know any thing of them but their pedigree — yet we talk of the goodneſs and badneſs of ſtallions, as if the mare had no concern in the quality of the produce; and what is worſe than this, moſt men who keep a ſtud, generally entertain a good opinion of their own mares;

ſo when they don't produce good colts, they as generally impute the fault to the horſe who got them—from ſuch prejudices, ſome of our beſt horſes often fall into the greateſt diſeſteem as ſtallions.

But now it ſhall be allowēd, that the excellence of horſes conſiſts in being of the true blood; what then? is it of any uſe to you, when experience ſhews it will not hold good in two full brothers? — But you cannot with common ſenſe believe, nor have any reaſon to ſuppoſe, that the virtue of that high blood or ſpirit, call it what you pleaſe, which was of no effect in the father, and which would not entitle him to be a racer, ſhould produce a better effect in the ſon, when this virtue is conſidered in the light the ſportſmen uſe it (that is) independently of form and matter.

Behold the man fired with the ſame ambition as the olympick heroes in antient days—his pride, his honour, his happineſs are concerned for conqueſt in the foot race—ſay that his intereſt is at ſtake alſo—Yet in vain ſhall the hero contend and ſtruggle, in vain ſhall he exert the operations of his mind or ſpirit, if his power and parts conducive to action be deficient or inferior to thoſe of his antagoniſt—grant to the horſe the ſame pride, the ſame ſpirit of emulation, the ſame ſenſe of honour, will not the caſe be ſuch with him alſo.

Again, obſerve the ſlothful indolent horſe, when heartily flogged, prevailing over his antagoniſt of a more willing ſpirit, and better diſpoſed to go on.

Theſe obſervations which I have made on the different families of race-horſes,

and

and betwixt thoſe of the ſame family, have made me conclude, that neither the virtue of the blood, or ſpirit, breed, pedigree, nor proper croſſing, will enable one of them to race, unleſs he has a proper formation, &c. along with it.

I believe then that the origin or breed of all horſes, as well as of all other things, of the ſame ſpecies, was the ſame in the beginning of time, and that all the difference betwixt the *Arabian* horſes, and all others, conſiſts in nothing elſe, but a peculiar elegance and formation of parts, and in having a greater ſhare of muſcular power—that is—the fibres of theſe muſcles being driven into cloſer contact, horſes are hereby enabled to move quicker, and with more force, that their membranes and teguments being compoſed of a finer and thinner ſubſtance,

ſtance, and their bones being ſmaller, of more ſolidity, and occupying leſs ſpace, they are and can be more eaſily acted upon by ſuch tendinous or muſcular force—and that for a greater duration of time, with leſs fatigue to theſe acting powers.

Now theſe are the ſole cauſes (proportion added thereto) of activity, as well as of ſtrength in all animals, whether the ſportſmen know it or not.

Perhaps it may be aſked, what gives wind to horſes, and whether the cauſes of that too are diſcoverable by the eye?

To this I anſwer, that clear or long-windedneſs depends on the very ſame principles in all dogs, in all horſes, and all other animals, as agility of action, and ability of perſeverance—— namely, the nature of their conſtituent

or

or component parts, (particular diſeaſes in theſe animals not coming into this queſtion) for elegance of parts is, in other words, wind and ſtrength and agility, at leaſt it is productive of them —and as the elegance of the external texture in the horſe is a certain ſtandard or teſt of a ſimilar elegance throughout the whole internal contexture, ſo far the cauſe of thorough-windedneſs, as it is called, may be ſaid to be diſtinguiſhable to the eye.

For inſtance, the bred-horſe will gallop twelve miles within the hour, without the leaſt fatigue, or being at all blown, but the cart horſe with ſuch a jaunt is fatigued, and tired and choaked—the reaſon I think is obvious to every man, namely, becauſe his eye enables him to perceive, that one, from the nature and difference of the component

ponent parts, acts with eaſe and facility to himſelf, and the other does not.

Now may not the man be thought mad, who ſays, the difference in the facility of reſpiration betwixt theſe horſes, depends in one upon form and matter, and in the other not? and is not he equally abſurd, who ſays, that the difference of wind, in two bred horſes of different families, does not depend on form and matter alſo in both, becauſe the degrees of elegance in the component parts of theſe two are not ſo obvious to his eye, as they are betwixt the bred horſe and the cart horſe.

But if we could ſuppoſe two horſes to be alike in health and condition, and formed and conſtituted alike in other reſpects, he that has the moſt capacious thorax or cheſt, will undoubtedly have the beſt wind, and this is confirmed by

by matters of fact, and would be known to all men, if they were not partial in their obſervation of things —and this too I underſtand to be *Virgil's* opinion, who, in his deſcription of a perfect horſe, makes this capacity of the cheſt a neceſſary ingredient; where he ſays,

Luxuriatque toris animoſum pectus—

To this it is objected, that many running horſes, with a leſs ample cheſt, have occaſionally excelled others, with a more capacious one—'tis very true —this too is eaſily accounted for, without appealing to hidden cauſes—for example—one horſe of a leſs ample cheſt, with great length and extent in his acting parts is to contend with another much ſhorter in theſe reſpects, of a more ample cheſt—but the organs of reſpiration may be more fatigued in

the laſt than in the firſt, becauſe the long horſe, who goes within his rate may act with eaſe and facility to himſelf, whilſt the ſhort one, who is forced to go at the top of his ſpeed, and yet not able to keep company with the other, is of courſe diſtreſſed and fatigued in every part.

For the reaſons that have been here given, the *Arabian* horſes, and their deſcendants, when properly choſen, are preferable to all others, whether you are to be carried a mile or a thouſand, either for pleaſure, expedition, or ſafety, let the weight be what it will—nor have any other horſes ſuch true courage, or calmneſs of temper, nor can they bear fatigue with equal fortitude, as our ſevere diſcipline of training will in ſome meaſure help to ſhew.

And

And they are not only beſt for riding, but for drawing alſo, if you will breed them to ſize, and inure them to it early, as it is the cuſtom to do with our horſes that are deſigned for drawing; for our horſes, whoſe acting powers, or ſinews, are oppreſſed with coarſe fleſhy membranes, thick teguments, and large ſpongy bones, will on this account be much ſooner fatigued and tired with their own weight, than the *Arabians*, even tho' their acting powers were equal in ſtrength to the *Arabian* horſes, which they by no means are, and that from a difference in the contexture of the muſcular or tendinous fibres.

Juſt ſo it is betwixt the ſouthern hounds, and thoſe we make uſe of to hunt the fox; and yet I have heard the huntſmen talk juſt as ridiculouſly of

the blood of fox hounds, as if it was ſomething independant of the formation and elegance of their parts, as the ſportſmen do about the blood of horſes.

But here the ſkilful huntſman differs from the ſportman in one reſpect, for the firſt very often gives away, or knocks his hound at head, without trying him at all, if he does not approve his figure—whereas the ſportſman always trains, if he likes the blood, let the horſe be ever ſo defective in the formation of parts, &c. But if he would conſider his racer merely as a horſe, and in the ſame mechanical ight, as he diſtinguiſhes his hunter from his cart horſe, and would wave this præternatural quality, which he underſtands by the word blood, it would ſave him much expence, and many diſappointments—For tho' the eye of man may perhaps not always determine,

with

with ſuch preciſion, as for us to ſay, this horſe ſhall make a capital racer, yet I will bold to ſay, that the eye of man can moſt frequently determine with ſo much certainty, (I mean amongſt bred horſes) as for us to ſay, this cannot run at all.

But this laſt aſſertion will be credited by very few ſportſmen; for this plain reaſon — namely, becauſe the opinion of their own judgment will not ſuffer them to aſſent to a truth, which they themſelves do not perceive —for all men fancy they underſtand horſes.

And now I am dealing in maxims, give me leave to add one more, which you may depend on for truth, and lay down as a certain criterion of the ſportſman's ſkill in horſes, namely, that the more ſtrenuous an advocate he is for

for this innate virtue, called blood, ſo much leſs knowledge he has of the animal, and which (opinion of blood) undoubtedly is in him, not a tacit, but an open and avowed acknowledgment of his ignorance—or elſe he would not have recourſe to occult and hidden cauſes, to account for facts, that are diſcoverable by the eye—But the word blood, received in its general acceptation, is found to be extremely convenient, becauſe it is agreeable to the good old law of cuſtom, from which fource the generality of men's opinions are derived, and ſo of courſe, it prevents the youthful ſportſman the trouble of making any enquiry into the form or nature of horſes.

Again, we talk juſt as ridiculouſly of bad as we do of good blood, and it is a common ſaying amongſt the ſportſmen, that they would chuſe to

breed

breed from a horſe, whoſe blood they liked, tho' he could not run, rather than from him, that could run well, whoſe blood they do not like, and yet both ſhall be thorough bred.

Now put the caſe, here are two mares, both originally bred from *Arabian* horſes, and mares, or the deſcendants of ſuch, which I ſuppoſe is all that is to be underſtood by the term of thorough bred horſes——one of theſe mares is called *Dutcheſs*, and is got by *Whitenoſe*, and becauſe the produce of this horſe has been generally found deficient in racing, they are branded with the infamy of bad blood, yet *Dutcheſs* was an extraordinary racer—the other of theſe mares was got by Lord *Godolphin*'s *Arabian*, the beſt reputed blood in the world, and called *Sylvia*—ſhe was a very bad racer—now pray ſir take your choice, which

of

of theſe will you have for a brood mare?—why according to your own doctrine you muſt take *Sylvia*—can the folly and nonſenſe of this opinion be equal to any thing but the practice of doing it?—So if my horſe or mare, who is thorough bred, and a deſcendant of *Whitenoſe*, *Stampcrab*, or any ſuch, ſhall either in the firſt, ſecond, third, or tenth deſcent, prove a good racer, (no matter from what cauſe) truly I muſt be afraid to breed from them, becauſe you, from the prejudices you have conceived, and from not underſtanding any thing about horſes, have been pleaſed to fix a mark of diſgrace upon ſome of their anceſtors.

Now by way of ſimile, let us ſuppoſe, that your grandfather and mine were knock-kneed—crook-legged, and ſplay-footed, theſe I think would have been but indifferent racers; but will it follow,

follow, that ſuch defects muſt of neceſſity be for ever entailed on all their poſterity? or don't you think, when any ſuch happen to be better formed, that they would be better runners, than their ſplay-footed grandfathers?—mark how the ſize, ſtrength, activity, ſhape, attitude, the beauty and regularity of their limbs and features, the ſpirit and temper amongſt all the families of men are loſt, or perhaps improved in one deſcent—how in all theſe reſpects this ſon differs from his father, and that from his grandfather?—Pray now will it, or will it not, be ſo with the horſe and his poſterity, whether you and I have diſcernment enough to perceive the difference there is betwixt them or not? but ſome difference of form muſt and will for ever ariſe in the breed and poſterity of men and horſes, and of all other animals, from the different form of the females, to which they

and their deſcendants are occaſionally joined in copulation, or elſe the laws of nature are of no account.

Thus you ſee the diſtinctions of good and bad blood, confined to the deſcendants of *Arabian* horſes, and mares, are equally abſurd and fooliſh——yet that the beſt and worſt racers are moſt likely to beget ſuch, cannot at all be doubted, and this was all that *Horace* could be ſuppoſed to mean, when he ſaid,

Eſt in equis patrum virtus—

which, in plain *Engliſh*, is to ſay, the laws of nature are generally certain —and thus ſay I——but this law of nature extends both to horſe and mare ——ſo then the breeding a good racer requires a thorough knowledge of the animal, and is a matter of judgment, and not of chance, which, by relying only

only on the blood, breed, or proper croſſing, you make it to be.

Now it has been here allowed, that the *Arabians* are the beſt kind of horſes we know of, from whom it can be expected to breed a racer, or in other words, the moſt perfect horſe, and that the offspring or deſcendants of ſuch are moſt likely to inherit the virtues of their progenitors; but when they are deficient in a proper formation of theſe acting parts, or loſe the elegance or muſcular ſubſtance of their progenitors, (no matter from what cauſe) they will, according to the degrees of deficiency, in any or all of theſe matters fail alſo, in the degrees of their performance—which truth we might ſee verified every day, if we were not blinded by our own prejudices, or underſtood any thing of the animal.

I believe alſo, that the *Arabian* horſes of the ſame family do occaſionally differ from each other, as much as any horſes can do, in any other country of the ſame family; ſo that the poſſeſſion of an *Arabian* horſe, who is wanting in the reſpects that have been here ſet down, will be of little uſe to the owner, let the genealogy, blood, breed, or lineage of ſuch horſe, be what it will.

It is for theſe reaſons I have aſſerted, and do aſſert, that the excellence of all horſes depends on their mechaniſm only.

So then there is nothing in blood, —no—nothing at all, independant of form and matter, as the ſportſmen ſay there is—But the *Arabian* horſes, being better conſtituted for action than other

horſes

horſes, do by means hereof excel all others, and each other alſo, according to the degrees of difference in their form and conſtituent parts,—the nature and difference of which I have here endeavoured to explain.

But it being out of the way of ſportſmen to be acquainted with the nature of bones, ſinews, membranes, ligaments, teguments, and ſo forth, and the different effects, with reſpect to the laws of motion produced by a difference in theſe matters, it is no wonder, that the ſuperior excellence found in ſome of theſe *Arabian* horſes, has been imputed to ſome peculiar hidden virtue, for which there might indeed be ſome plea, if there was no viſible difference betwixt the parts of the bred, and the-half bred horſe—yet I hope my reaſons for differing from this ancient opinion are not the leſs

leſs true, for not having been advanced before, nor tho' all mankind ſhould diſſent herefrom.

Now, if it be aſked, why the *Turks* and *Barbs* are not here ſpoken of, as horſes proper to get racers, ſuch as heretofore were the *Byerly Turk*, *Curwen's Barb*, the *St. Victor Barb*, and many other famous ſtallions, I ſay as I did before, that there is no difference in any horſes in the world, but what is produced by food and climate—— and as ſome *Barbs* have nearly the ſame elegance of parts, as ſome *Arabians*, or *Aſiatick* horſes, there is no reaſon, why ſome *Barbs*, when choſen with a proper formation, ſubſtance, &c. ſhould not beget good racers.

If it be aſked then, how it happens, that we have no *Barbs* in our days, who get good racers, I beg leave to

anſwer

anſwer that queſtion by aſking another, which is how it happens, that we have no *Arabians* or *Aſiaticks* now-a-days that get good racers ?—why the reaſon is very evident, becauſe the people of the country perceive very plainly, that thoſe who purchaſe them to bring here, know nothing of the matter—and ſo when the *Africans* or *Aſiaticks* ſell or make preſents of their horſes to this kingdom, I dare ſay, they ſend the worſt they have, becauſe they know we think it a ſufficient merit in the horſe, that he comes from their country—Juſt ſo the people in many parts of *Europe* are fond of *Engliſh* hunters, and if the horſe comes from hence, he carries with him ſufficient merit.—But I will venture to ſay, there is not one in a hundred ſent out of this kingdom worth a guinea, when compared to ſome other of our common *Engliſh* hunters, of the very ſame ſtamp——

pray

pray now may not this be true alſo, with reſpect to the horſes ſent here from other parts of the world—compared to one another—even tho' the worſt of theirs ſhould excel the beſt of ours in all reſpects—and if the people in other countries underſtand the art of breeding horſes no better than we do, and conſider the laws of nature as little, it cannot be otherwiſe—But to ſhew, that a proper choice of theſe *Barbs* and *Arabs* is a matter of judgment, and not of chance, I think it is ſaid, that all, or moſt of the horſes and mares brought over by Mr. *Marſhall*, ſtud-maſter in the reign of Queen *Anne*, produced good racers—and I make no doubt, but any man who was a real judge of horſes, and would conſider them merely as ſuch, and not be running mad after qualities independant of form and matter, that was allowed to chuſe ſuch as he liked

from

from either of theſe countries, might bring home ſome as good ſtallions as ever came from the ſame countries.

As to the fine horſes brought here under the appellation of *Turks*—they are real *Arabs* or *Aſiaticks*; for the true native *Turkiſh* horſe is by all accounts ſuch as our heavy *Lincolnſhire* horſe.

But the Grand Seignior has a very large ſtud of theſe fine horſes, of which they are ſo choice, that it is a difficult matter for a chriſtian to obtain even the ſight of them—and theſe fine horſes are not bred in that country, but the emirs or governors in *Arabia*, where theſe fine horſes grow (if I may ſo ſay) ſend a number of colts every year to *Turkey* for the Grand Seignior's uſe, which is the only tribute they pay—theſe being turned to graſs on good land, and kept well, acquire a much larger ſize,

and a forehand different from the horſe brought up in the deſart, or the mountainous parts of *Aſia*— but from the nature of their food and climate, or both, they ſeldom have ſuch elegance of parts as the other.

Beſides theſe fine horſes, which the Grand Seignior has for his ſtud, other inhabitants of *Turkey* purchaſe ſome of theſe horſes of the people, who trade to and from thence through the different parts of *Aſia*, *Arabia*, and its borders—ſo that the fine horſes brought hither from *Turkey*, are either the refuſe of the Grand Seignior's ſtables, or ſuch as are bought of the inhabitants of that country, which they do not like.

Now from the native heavy *Turkiſh* mares, and the fine horſes brought from the different parts of *Aſia*, there are as many different ſorts or degrees

of horſes in *Turkey*, as there are in *England*—where we may reckon the cart horſe, the coach horſe, the miller's horſe, the butcher's horſe, the hackney or the road horſe, the hunter, and the race horſe—which difference of appellation is derived from the particular uſes, to which ſuch and ſuch horſes are generally put——but their real difference is owing to the want of affinity, or the diſtance and nearneſs thereof to the *Arabian* or *Aſiatick* horſe.

And all theſe finer horſes called *Turks*, and *Barbs*, and thoſe brought up in the deſart, and the more fertile parts of *Aſia*, are in general eaſily known from each other—for inſtance ——the horſe brought up in the deſart, ſeldom reaches, and hardly ever exceeds fourteen hands and a half—all theſe horſes are ſaid to have thick,

ſhort coarſe necks, and ſo are called, by the generality of travellers, little ill-ſhaped, ugly horſes—and this thickneſs and ſhortneſs of the neck is imputed to their never being turned to graſs when young; for the *Arabs*, who live encamped in the deſart, and move about from place to place in ſearch of herbage, whoſe home is uncertain, have it not in their power to turn out their colts in ſuch an open wild country of ſo many hundred miles extent, for if they did, they could not with any probability ever expect to ſee one of them again—But theſe horſes, mares, and colts are maintained with chopped ſtraw, barley, camels milk and flour, the other cattle (breeding of which and of horſes is the *Arabs* trade) eating all the herbage they can find.

And the horſes brought up in the deſart are known by their temper, as well

well as their ſize and figure; for being ever kept from their youth in the tents of the *Arabs*, and in the ſame apartments with themſelves and children, they, by this familiar and domeſtick way of living, become as tame and paſſive as their dogs—and ſo by an indolent poſture, habit of ſtanding, and lolloping about in the tents, they acquire an aukward gate, and crooked growth in ſome parts, which we ſay is very ugly—and ſo we conclude, that the goodneſs of ſuch horſes, when they get good racers, conſiſts in ſome innate quality, void of form and matter—which is ever underſtood by the word *blood*—for inſtance—Lord *Godolphin*'s *Arabian*—this horſe, except his being too narrow in the boſom, and a little lengthy on his fore-legs, was in all other reſpects a very juſt horſe, and more likely in my opinion to get a good racer, than any horſe I ever ſaw,

and

and yet he was looked upon by moſt people in a different light, becauſe moſt people judge of a horſe by his fore-hand only, which in fact has nothing to do with racing nor action—one ſaid, he was an ordinary, ill-grown ugly horſe; others ſaid, he was a lump of fleſh, not knowing, that the ſtrength of all animals is in great part deriv from this fleſh, or muſcular ſubſtance, and the nature thereof—and ſo by ſeeing theſe horſes in miniature, and by a careleſs examination of the laws of nature, and enquiry into facts, we draw falſe concluſions about them, as we do in general about moſt other things.

Now theſe colts bred by the *Arabs*, who inhabit the deſart, are more coveted by the *Turk*, and all the rulers of his mighty empire (ſome of whom keep immenſe numbers of theſe fine horſes)

horſes) than any other horſes bred in the confines of *Aſia*.

It is ſaid, that the *Arabs* keep a more exact account of the genealogy of their horſes, than of themſelves; yes——ſo they do, of ſuch as have performed ſome extraordinary feats in their expeditions —— and whenever they have a colt dropped of a favourite ſort, they get ſome other *Arabs* to be witneſſes and vouchers thereto, and his marks, and colour and lineage are faithfully ſet down in writing, the particulars of all which are atteſted with much ſolemnity when ſuch colt is ſold, and this certificate is alſo produced.

Now ſuch colts are rated at a higher value than common, and hence the notion is derived, that the *Arabs* have different kinds of horſes, ſome of which

which are (according to our phraſe) of the right and true blood, and others not——pray, to what end ſhould the *Arab* breed different kinds of horſes, whoſe only value or uſe to him is ſwiftneſs and ſtoutneſs?

But all that is underſtood by the breed or genealogy of the *Arab*'s horſe by himſelf (however we underſtand it) is, that he is deſcended from ſuch as have undergone the hardſhips of labour, fatigue, and faſting, with the utmoſt fortitude and reſolution, and have brought him off with ſafety, by ſuperior ſpeed and perſeverance in times of imminent danger, in his expeditions of plundering or defending travellers in their journey thro' the deſart, for which ſome of them are paid by the Grand *Turk*——and ſuch a genealogical account of their horſes as this is a very rational one——it is a more certain preſerving

way of eſtimating their value and excellence, and a likely method too of perſerving a good breed—but the *Arab* has no other idea, nor ways of reaſoning about the breed, lineage, or genealogy of his horſe than *Horace* had, when he ſaid,

Fortes creantur, fortibus et bonis—

The fatigue their mares are ſaid occaſionally to undergo (which the *Arabs* generally ride) is almoſt beyond credibility, it being affirmed, that they ſometimes keep them out on their expeditions for two days and a night together, without the leaſt ſuſtenance, or any poſſibility of giving them a drop of water.

For the reaſons that have been here given, ſome of them are valued at more than two thouſand crowns, and

ſome at leſs than two hundred—juſt ſo it is in *England*, where ſome of our beſt bred horſes are ſold for five hundred guineas, and ſome for leſs than fifty.

From the great regard which the rulers of the *Arabian* provinces pay to the colts or horſes of ſuch favourite ſort; it ſhould ſeem highly probable, that we don't get many of them here, but if we do, it is full as probable, that they are ſuch as are not liked there; and I ſhould be glad to know, why one of theſe horſes, of the beſt repute for country and genealogy, may not happen to differ as much from ſome of his family and brethren in all reſpects, as

Conqueror did from *Othello*,
Infant from *Mirza*,
Mr. *Croft*'s *Baſto* from Lord *Onſlow*'s
Victorious,
Bold from *Lightning*,

The

The *Martindale Starling* from his full brother.

Of this kind there are numberleſs other examples that might be quoted—but common ſenſe, and matters of fact, won't do for us, who are hunting back ten generations for the inherent virtues of thoſe horſes, which were loſt perhaps in the laſt deſcent, or ſooner, by ſome default in the law of nature, or want of proper ſkill in the breeder.

Juſt ſo it is with greyhounds and chace hounds of all ſorts, amongſt which one ſhall excel both in ſpeed and ſtoutneſs, and his brother in neither.

If any man ſhould here object, and ſay, that *Cade*, tho' he could not run

ſo well, got better racers than his brother *Lath*—I think the objection deſerves no anſwer, for where *Lath* covered one mare, I dare ſay *Cade* covered a hundred.

And this is a true account of the horſes bred and brought up in the deſart, according to the relation of a ſea officer, who for reaſons beſt known to himſelf, lived fourteen years in the deſart amongſt the *Arabs*, and ſpoke their language, and who could have no intereſt at all in giving a falſe account of theſe matters—and theſe horſes in general, that are bred and brought up in the deſart, and ſome other mountainous parts of *Aſia*, will juſtly claim our preference as ſtallions, on account of their ſuperior elegance of parts to all other horſes brought up in *Barbary*, *Turkey*, and the more fertile parts of *Aſia*, even tho' they all ſhould be of

the

the ſame lineage, ſhould have the ſame formation of parts, the ſame ſubſtance, and the ſame proportion—but no man in his ſenſes can believe, that all the horſes brought up in the deſart, even thoſe that are brothers, will always have the ſame formation, proportion and ſubſtance, nor even the ſame elegance of parts, any more than other horſes, dogs or men of the ſame family brought up in any other part of the world—and if the difference of formation and elegance, &c. of theſe horſes produces no effect nor difference with reſpect to their actions, why then it does not ſignify a pin, as it was before ſaid, how any of them, or their deſcendants are formed or conſtituted, if they happen to be of the right and true family—and then alſo any two brothers of the ſame right family, ever ſo differently formed and conſtituted from each other, will ever be juſt as

good

good as each other, (health and condition alike) which neither obſervation nor common ſenſe will allow to be true.

This ſhort account of the figure of the horſes brought up in the deſart, will teach us how to know them from the *Arabs* brought up in *Turkey*—and from all other horſes too, brought up in the more fertile parts of *Aſia*—in ſome parts of *Syria*, in *Turcomania*, which is the antient *Armenia*, in the principality of *Baſſerah*, and many other parts of *Aſia*; horſes are nearly of the ſame ſtamp as thoſe of the deſart, but the horſes brought up in the fertile parts of *Aſia*, generally arrive to a better ſize, tho' of leſs elegance, than thoſe brought up in the deſart, and ſome other mountainous parts of *Aſia*, and by action and running about, and ſtretching out their necks to graze, they have different forehands, and ac-

quire

quire a more manifeſt, more open and more ample ſhape, in ſome particular points, the perfection or imperfection of which, are then moſt eaſily diſtinguiſhed by moſt men——and theſe horſes brought up in the more fertile parts of *Aſia*, have in general more elegance, than the *Arabs* brought up in *Turkey*, tho' they ſeldom arrive to their height—and all this difference of ſize, temper, figure, and elegance of parts betwixt theſe horſes, is by all accounts the effect alone of food and climate, and manner of being brought up—for food, and manner of keeping, will produce a difference in the very ſame family of horſes, brought up in the ſame climate; and I think a man, who underſtood horſes, and the laws of nature, might undertake here in *England* to breed a horſe in leſs than ten deſcents (if he ſhould live ſo long) full as coarſe and inelegant as the black

Lincolnſhire horſe——and that too from the beſt bred and moſt elegant horſe and mare in the kingdom, and ſome of their immediate deſcendants, by obſerving well the defects of nature, and by always keeping them on low wet ground, rich herbage, and by expoſing them to all the inclemencies of weather.

It is affirmed by many people of veracity, that the air of the defart is ſo free from vapours, that there is not moiſture or damp ſufficient to affect the brighteſt gun with the leaſt ſhade of ruſt, after laying it abroad the whole night.

The different effects then of humid or dry air are worth obſerving; if you hang up a cord or ſtring of any kind, it becomes contracted or relaxed, according to the degrees of humidity or dryneſs of the air.—What elſe is the ſinew

of

of a horſe but a cord or ſtring, compoſed of many threads or fibres?—— from ſuch temperature of the air, the ſinew of the mountain *Arab* is like a bar of iron; hence the degrees of difference betwixt him and ſome other *Aſiatick* horſes, and all other horſes of the world, the nature of the food conſidered alſo.

But we underſtand ſo little about the matter, that theſe very horſes are called weak cat-legged things, and our great coarſe brutes, with hairy legs, thick ſkins, and lax fibres, are eſteemed much the ſtrongeſt, by ninety nine men in every hundred throughout this kingdom.

As to the *Barbs*, I mean thoſe only which I have ſeen, all have a particular caſt or turn in their hinder parts, from which they may in general be eaſily known by an obſervant eye.

And now having ſettled this matter with myſelf, I leave the ſportſmen to conſider, whether the excellence of horſes depends on form and matter only, or on ſomething elſe, of which they can give no account——But I would fain recommend it to other breeders, for their own good, and that of the community, to think of ſubſtance, proportion, elegance and formation of parts, as the only law, whereby the actions of all animals can be performed, without a manifeſt contradiction to the general laws of nature, and the ways and wiſdom of providence——and the breeder by ſtudying theſe matters will have more merit, more certainty, and more pleaſure too, in breeding a good horſe, than when he relies on any thing elſe, which at beſt amounts to chance only.

Yet

Yet I fear my doctrine, tho' ever ſo true, will produce but little good, becauſe it is almoſt impoſſible, thoroughly to underſtand wherein the perfection of the horſe conſiſts, without underſtanding in ſome meaſure the nature and uſe of his component parts——and ſomething alſo concerning the laws of anatomy and mechanicks.

Now the attachment of ſome men to a half-bred, or what is commonly called a good *Engliſh* horſe, is, I think, full as abſurd, as the opinion of the ſportſmen about blood—they object, that theſe cat-legged things (as they are pleaſed to call bred horſes, whoſe legs in general are by the bye a great deal larger than they appear to an injudicious eye) are fit for nothing but the race —that half-bred horſes will loſe them on ſome roads with a heavy weight—

that they go near the ground—are apt to blunder—are long paſterned — and have an aukward way of going.

To the firſt I anſwer, that if any man be willing to match a horſe, which he will certify to be half-bred, againſt another certified to be thorough bred, I will undertake to find him a play-fellow, that will entertain him for what ſum he pleaſes, and the owner of the half-bred horſe ſhall chuſe his ground, length and weight.

But the man who never ſaw bay *Bolton*, *Atlas*, *Tartar*, and many o-thers that might be named, may per-haps think, there are no bred horſes of ſtrength and ſize, and ſubſtance, ſuf-ficient to ſtruggle with deep roads, and heavy weights.

To

To the next objection, that bred horſes go near the ground—I anſwer, that the generality of ſuch having been trained from their youth on a ſmooth ſurface, ſome of them do go near the ground, but this, in my opinion, is partly owing to the nature of the ground, education and fatigue in their tender years, and partly to the manner of ſetting on the arm, and is not the certain conſequence of being a bred horſe, becauſe there are many bred horſes, who, with this ſame education and uſe, do not by any means go near the ground.

As to blundering, it is very abſurd to ſuppoſe, that the bred horſe as ſuch, is leſs ſure-footed than the other, for beſides his having more agility, ſtrength, and true courage than the other; the very formation of parts, will indicate the

the contrary—for not to ſay any thing about ſetting on the arm, or the rules of proportion from the elbow to the knee, and from thence to the fetlock, nor the formation of the knee itſelf, theſe bred horſes having in general more depth and declivity in their ſhoulders than others, they can moſt certainly better extend, and elevate their fore feet, *cæteris paribus*—and by the curve or circular figure, they do or ſhould make with their hinder legs—they, as certainly can ſtand more ſecurely on all kinds of ground—whilſt the generality of our *Engliſh* horſes, ſtand upon four ſticks or uprights, that ſeem, as if they were deſigned rather for props of ſupport than for extent or action—and the advantages of this declivity in the ſhoulders of horſes will be farther explained, by obſerving with what facility, both to themſelves and the rider, ſuch go down the ſteepeſt

hills,

hills, with the utmoſt precipitancy and ſafety, whilſt other horſes, who want this declivity in the ſhoulders, rock and rowl about on ſuch ſteep ground, to their own terror, as well as that of the rider, if he happens to have the ſenſe of feeling.

With reſpect to the length of the paſtern, even for common riding, where expedition may not be required, there is juſt as much difference in point of eaſe to the rider, betwixt a long and a ſhort paſterned horſe, as there is betwixt riding in a carriage that is hung upon ſprings, and one that is not—— yet I do not think it neceſſary, that one of theſe bred horſes ſhould be as long paſterned for the road or hunting, as for racing—but he will undoubtedly ſtand more ſecurely on his legs, by having lax and ſpringy paſterns (all other parts alike) than by having them ſtiff,

and

and upright, both which circumſtances muſt of neceſſity appertain in degree at leaſt to ſhort paſterned horſes.

As to the mode or manner of going, it ſcarce deſerves any anſwer, tho' all that can be ſaid will make againſt the half-bred horſe.

Theſe objectors ſay, that there is not one bred horſe in fifty, who does his paces well; to which I anſwer, there is not one half-bred horſe in five hundred that does his paces well; but ever body knows, or may know, that a half-bred horſe, who is ever ſo well put together, and does not go well, will ſoon tire, and is not worth ſixpence for riding; but the mode or manner of going in a bred horſe, if he be well put together, is perhaps of little conſequence to his goodneſs, (at leaſt that we can be ſure of) there having been

many inſtances of exceeding good racers, who were very aukward goers, of which *Sterling* will ſerve for one proof——and therefore I take upon me to ſay, in contradiction to the opinion of all the good judges in this kingdom, of every denomination, of which there are as many in number within one or two, as there are men —— that the aukward manner of going in a bred horſe, that is well grown, and uſed only for the road or hunting, does not ſignify a pin—— provided he goes above his ground and gets along—And ſuch a horſe, (equally maſter of my weight) I would prefer to the beſt goer in the kingdom, that was but half-bred—— and farther, I look upon a half-bred horſe as a brute and a beaſt, that no man of property, who underſtood horſes, would ever uſe at all, if he had, or could get any conveniency for breed-

ing—perhaps it may be ſaid, that it is no eaſy matter to raiſe bred horſes to height and ſubſtance, proper for every purpoſe—this I conceive to be a miſtake, and is, what depends in great meaſure on the judgment of the breeder, and his knowledge of the laws of nature—witneſs the late Duke of *Bolton*, whoſe horſes in general were victorious on the turf, maſters of any weight in the chace—and fitter for the coach too than any other horſes I ever ſaw, either for expedition, length of journey, or both.

But if theſe objectors to the thorough-bred horſe want to decide theſe matters by the examples of ſuch refuſe, as are turned out of training, I do not agree to it, for I propoſe not to give any advantages of form, ſubſtance, or proportion, but my deſign is to ſhew, that the thorough-bred horſe, when

properly

properly choſen, is, for every purpoſe, far ſuperior to him that is half-bred, and that for the ſame reaſons, that the cat-legged ſtag excels the bullock, the fox hound excels the ſouthern hound, and the fine ſetting dog the *Spaniſh* pointer.

And why this ſuperiority in the bred horſe is not equally believed by all men, is, becauſe the difference in the nature of their conſtituent parts is not equally underſtood by all men—which alſo is the very reaſon (as was before ſaid) why the ſportſmen have always imputed this ſuperiority, in what we call the bred horſe, to ſome innate or hidden cauſe.

Let us return to the uſe of ſalt.

Now this medicine externally applied is a great diſcutient, and inwardly taken a great deobſtruent.

From this deobſtruent quality of ſalt it ſtands recommended to the world; but if any man is acquainted with one that is more ſo, he would be highly culpable not to uſe it.——Nor am I ſo partial an advocate for this medicine, as to think it incapable of improvement, by being joined to ſome other; for antimony added to nitre will make it a more powerful deobſtruent, and a more efficacious medicine in all diſeaſes befalling the horſe.

If then we take two parts of nitre, and one of crocus metallorum, firſt rubbed together, and deflagrate them over a fire in a crucible, by putting in a little at a time, we ſhall have a medicine nearly analogous to Dr. *James*'s powder—one or two ounces of which may be given once or twice a day, as occaſion may require.

This

This will be found a very potent remedy in the farcey—in cutaneous diſeaſes—local ſwellings—where the juices are viſcid—and the circulation is become languid———loſs of appetite ———in plethorick———in bilious complaints———where the blood is depraved by any antecedent fever———in the inflammatory cholick—and all inflammatory diſorders—in obſtructions of the urinary paſſages, and all others—in epidemical diſeaſes, or what is called the diſtemper amongſt cows and horſes—in coughs, colds, ſore throats, in fevers of every kind, and many chronical diſorders———for this medicine attenuates the fluids, and promotes ſecretion and excretion more copiouſly—hence obſtructions productive of diſeaſe are removed, and the animal is reſtored to his priſtine health—to this deflagrated nitre and antimony, other cooling neutral

neutral ſalts may be added with great propriety on all occaſions, where the firſt ſhall be thought proper.

If any man ſhould wonder at, or object to the virtue of ſalts and antimony, conſidered in ſuch a univerſal light, I deſire he will conſider and remember too, that in the diſeaſes, which befal horſes, the fluids only are in general concerned, which is owing to the ſameneſs and ſimplicity of their food——hence too, the viſcidity of their fluids is more eaſily removed, hence their diſeaſes are leſs complicated, leſs various, and leſs intricate, than in the human ſpecies, whoſe luxurious and unconfined repaſts have produced ſuch a number and variety of complaints, as perplex and puzzle the moſt nice enquiry.

But

But leaſt I ſhould be thought too fond of the virtues of ſalt, with reſpect to its general efficacy, I ſhould be glad to know wherein conſiſts the virtue of all the waters of the world, but in the ſalt which they contain; the water itſelf having no more effect, than any other common watery vehicle.—Hot ones indeed (whilſt they remain in a ſtate of heat) may perhaps be impregnated with other materials alſo.

Hence the phyſician, having long in vain drenched the ſickly mortal with every drug the world affords, ſends him at laſt to drink ſome kind of water, that happens to be moſt in faſhion.—Now the ſalts of different waters differ in their nature and effect, whereby different conſtitutions are diverſely affected.—Hence the patient of the ſon of *Æſculapius* is often left, like the farriers, to be cured by chance.

—*Quid*

——Quid rides? mutato nomine, de te fabula narratur——

But tho' men, as well as horſes, often die of the doctor, yet there are many worthy practitioners in this kingdom, whoſe integrity, judgment, and obſervation, do honour to themſelves, and benefit to mankind.

Now the author has told his tale in as conciſe a manner as he well could, being inclined to edify, rather than puzzle the reader, by multiplying uſeleſs words and medicines, or by enumerating diſeaſes that do not exiſt at all, but in the imagination of authors, who thought themſelves obliged to treat of every diſorder they had ever heard of incident to man, as if they believed the horſe was afflicted with all ſuch——this conciſeneſs will ſave

both

both writer and reader ſome trouble, which is a matter of no ſmall conſideration; and the author is of opinion, that he has done more good in bringing the practice of phyſick with reſpect to horſes into this narrow compaſs, than if his book had been furniſhed with a greater number of receipts and medicines—And if the medicines given to Mankind were alſo brought into narrower compaſs, he humbly conceives (with all deference to the learned) it would be no detriment to any but thoſe who ſell them.

He has endeavoured to treat this ſubject as clearly as he could, tho' no method of treating diſeaſes or wounds can be ſo clear or preciſe, but that much will depend on the judgment of the practitioner. —— In the one caſe, from appearance and locality; in the other, from the occurrence of vari-

ous ſymptoms often annexed to the ſame diſeaſe; in both, from habit of body.

And if the practitioner ſhould ever find his purpoſe not anſwered in having given any of the medicines here recommended, I muſt beg the favour of him to think, that it may poſſibly be owing to his want of ſkill in the proper uſe and management of them; and to conſider, that the reading of any one or ten phyſical books (though ever ſo perfect) will never make a man an able phyſician, the ſkill of ſuch a one conſiſting as much in his obſervation of the attempts of nature, a thorough knowledge of the animal œconomy, and a proper application of the remedy, as well as to know the virtues which do belong to it. — Add to this, the ſymptoms may ſometimes be taken for the diſeaſe, and the diſeaſe for the ſymptoms.—Again, ſome

diſeaſes

diſeaſes from having the ſame appear-ance may be miſtaken for each other, as has been ſhewn in the caſe of the *Botts*. Moreover, medicines given to a horſe, that may from his particular conſtitution diſagree with him; ſuch for inſtance, as nitre (the leaſt quantity of which ſome men, and ſome horſes, are utterly unable to take without ſudden bad effects) may bring on new ſymptoms utterly unconnected with the diſeaſe, and for which there is no poſſibility of laying down any certain proper treatment, and yet this is not owing to, nor ought to be imputed to any fault in the medicine, but to the particular habit of body in thoſe who take it, which no human wiſdom can foreſee.

Again, it is a general cuſtom, when horſes have colds or fevers, to load them with a vaſt quantity of ſuperflu-

ous cloaths, but this encreaſes the impetus of the blood, and accelerates its motion—hence enſues an encreaſed contraction of the veſſels, and an impeded ſecretion and excretion of the fluids, ſo that inciſions made in the ſkin of a horſe ill with a fever, will not afford ſo great a diſcharge, as they would otherwiſe do, neither will he be ſo much relieved by bleeding, when this practice of loading him with cloaths is made uſe of——for theſe reaſons alſo, all medicines that are of a heating quality given to the horſe in a fever are improper, and muſt do harm.

But there is leſs ſkill required in treating properly the diſeaſes of horſes, than of men; for tho' horſes cannot tell their complaints as men can, yet their diſeaſes are more eaſily known, and better underſtood by a nice obſer-

ver,

ver, becauſe they are leſs complicated, and leſs various, and that for the reaſon before given, namely, the nature and famineſs of their food.

And now, gentle reader, if you have ever read much on this ſubject, you have alſo read of many other diſeaſes incident to the horſe, beſides what are contained in this little book; but for my own part, who am ever ready to confeſs my failings, I acknowledge, that I have not been able to diſcover any other (few excepted) than what have been here treated of; but I can readily believe, that a horſe may have tumours internally, encyſted, and other; that he may have diſeaſes of the omentum, and of the blood veſſels, attended with ruptures of the ſame.

But I hold it vain, to trouble the reader with an account of diſeaſes that will

will admit of a very uncertain, or no remedy, tho' managed perhaps with the greateſt ſkill——Yet I hear there is a treatiſe compiling on this ſubject, which, they ſay, cannot be contained in leſs than ten volumes; therefore I take it for granted, that it is not an incompleat one, like mine; but if the number of medicines to be given the horſe, ſhould be equal to the number of diſeaſes, which, from the quantity of the work may be ſuppoſed to be contained therein, I ſhall be heartily concerned for this moſt noble animal, for whom I have long had a particular friendſhip, from the many virtues I have diſcovered in him.

There is another diſeaſe indeed incident to horſes, called the glanders; the nature, cauſe, and ſeat of which may perhaps be publiſhed hereafter.

OBSER-

OBSERVATION I.

That the generality of lameneſs in the fore part of the horſe derives its cauſe from the improper methods of ſhoeing, and treating the foot.

II.

That ſuch lameneſs, tho' the cauſe be not viſible to a common obſerver, nor underſtood by ſuch as are unacquainted with the nature and uſe of the parts, and therefore commonly miſtaken, and ſo deemed incurable, may be moſt frequently cured.

III.

That the cuſtom amongſt farriers, of applying remedies to the different parts of a lame horſe at the ſame time, is a certain proof of their ignorance, and a manifeſt confeſſion of not underſtanding the true ſeat of the complaint.

IV.

IV.

That from the great diſlike all farriers have to flat or ſhort ſhoes, every lameneſs in the horſe is by them ever imputed to ſuch ſhoes — be the real cauſe what it will—few men believing there is any advantage in what they do not already know, or have not been accuſtomed to.

V.

That ſhort ſhoes often prevent cutting either behind or before.

VI.

When the ſinew of a horſe is relaxed, or elongated, or what we call let down, make two inciſions thro' the ſkin below the diſeaſed part, and keep them running, taking care not to wound the ſheath or fibres of the tendon—apply to the relaxed part alum, curds and whey, or the ſalt cataplaſm, with

with a ſmooth bandage — thus many a horſe has been effectually cured after having been bliſtered and fired to no purpoſe—Thus have I known too many a heavy ſtag-hound, that was quite let down behind, and went upon his hocks, to be cured, and afterwards run in the pack, only by making an inciſion in the ſkin, and filling it with ſalt.

VII.

Where bleeding and rowelling are directed to be uſed together, it is not intended, that bleeding ſhould be uſed after the rowels have begun to diſcharge well, nor will there be any occaſion for it——But before the rowels have begun to diſcharge, and the ſymptoms appear dangerous, then repeated bleeding may be allowed of, and will be often neceſſary——for the horſe may otherwiſe die, before the rowels can poſſibly take effect.

VIII.

That in vertiginous or convulsive diſorders—opiates ought to be given, if any ſuch ſymptoms remain, after the fever is gone off, and proper evacuations have been previouſly uſed.

IX.

That in cutaneous diſeaſes about the neck or body of the horſe, not ſubmitting to gentle purges, and alterative medicines, bliſtering the part will ſometimes be of uſe.

X.

That in cold watery ſwellings, or the greaſe, caſtile ſoap and yellow reſin, may properly enough be given, mixed with the deflagrated nitre and antimony, and other neutral ſalts, firſt emptying the inteſtines by a gentle purge—but where there is any degree of

of inflammation attending a ſwelling, reſin will be an improper medicine.

XI.

That there is a certain degree of ſkill required in the uſe of ſuch diuretick medicines, (as well as of all others) for if the urinary ſecretions are too much enlarged in ſuch complaints, where the horſe's blood is already poor and thin, the diſeaſe will be increaſed, rather than leſſened.

XII.

Sandcracks, corns, and falſe quarters are cured with the greateſt certainty; and many other diſorders, that have been always deemed incurable, becauſe not properly underſtood.

XIII.

Incurable lameneſs will be ſhewn to be ſuch, whereby the horſe will eſcape an unneceſſary puniſhment, and the owner avoid a uſeleſs expence.

XIV.

XIV.

Spavins will be moſt frequently cured, after having been in vain attempted by others.

XV.

That all perſons may be furniſhed by the Author with medicines, which are proved by long experience to be an efficacious remedy in recent coughs, colds, convulſions, mad-ſtaggers, fevers, inflammatory diſorders of all kinds, and ſuch as proceed from obſtructed fluids—and with medicines proper for horſes in all other complaints, as cheap as at any chymiſts, which the ſportſman may carry with him into the country—with directions how to uſe them.

Blenheim Street, in
Bond Street.

ERRATA.

Page 29. Line 8. *for* ineviably *read* inevitably.—P. 56. l. 8. *for* linaments *r.* liniment.—P. 58. l. 1. *for* ulceration *r.* corroſion.—P. 221. l. 6. *for* ſhoutneſs *r.* ſtoutneſs.—P. 222. l. 16. *for* hinder of it *r.* hinder part of it.—P. 223. l. 5. *for* leg *r.* legs.—P. 244. l. 16. *for* ight *r.* light.—P. 11. line 11. *for* ſole *r.* foot.—P. 176. l. 17. *for* botts *r.* bott.—P. 38. l. 21. *for* Là Foſſe's ſhoes *r.* ſhort or narrow ſhoes.—P. 222. l. 3. *for* better cæteris paribus *r.* better with long paſterns, cæteris paribus.—P. 265. l. 3. *for* perſerving *r.* preſerving.

FINIS.